Supply Linkages and Power Relations in the UK Agro-Food System

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Abstract

The thesis is concerned with the way in which supply linkages in the UK Agro-Food System (AFS) were organised and regulated between 1947 – 2001. It further considers, for the specific case of Cumbria, the extent to which, how and whether regionalised supply linkages are viable between farmers and food processors. The thesis also considers how regimes of advanced capitalist accumulation and Food Regimes demonstrate broadly similar modes of social regulation (MSR). In order to investigate these issues a conceptual framework is established, based on the concepts of Food Regimes and Regulation Theory and existing literature is used to develop an in-depth analysis of the MSRs and the impact of Food Regimes on farmers and food processors in the UK. Empirical work uses in-depth, qualitative, case studies representing food processors and farmers in North Cumbria to explore how their supply linkages are organised and regulated, the significance of the region to their supply linkages and production activities, and their perceptions of the viability of regionalised AFS supply linkages in North Cumbria. Findings suggest that the organisation and regulation of these food processors' and farmers' supply linkage currently bears some of the hallmarks of the MSRs of both the 2nd and 3rd Food Regimes. Some farmers and food processors do use their 'home' region as a source of resources that enable them to manage their enterprises, and these case studies are generally very unwilling to be involved in a regional supply network with other farmers and food processors in the region. Finally, the findings reveal that multiple grocery retailers, food safety and consumer demands are the key influences upon the organisation and regulation of these case studies' supply linkages. The study thus suggests that there are currently significant barriers to achieving the regionalised model of AFS development in the UK.

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Glossary of Terms Used

AFS	Agro-Food System
BSE	Bovine Spongiform Encephalopathy
CAP	Common Agricultural Policy
CAQDAS	Computer Aided Qualitative Data Analysis
CIIA	Cumbria Inward Investment Agency
CRED	Centre for Regional Economic Development, University of Northumbria
DEFRA	Department of the Environment Food and Rural Affairs
ERDP	England Rural Development Plan
EU	European Union
FMD	Foot and Mouth Disease
FSA	Food Safety Act (1990)
GATT	General Agreement on Tariffs and Trade
GMO	Gentically Modified Organism
GT	Grounded Theory
HACCP	Hazard Analysis and Critical Control Points' Analysis
IFST	Institute of Food Science and Technology
ISO	International Standards Order
MAFF	Ministry of Agriculture, Fisheries and Food
MGRs	Multiple Grocery Retailers
MNC	Multi-National Company
MOA	Method of Articulation
MSFPs	Multi Site Food Processors
MSR	Mode of Social Regulation
NGO	Non Governmental Officers
NWRDA	North West Regional Development Agency
RDAs	Regional Development Agencies
RPM	Retail Price Maintenance Act
RT	Regulation Theory
SME	Small to Medium sized Enterprise
TQM	Total Quality Management
WTO	World Trade Organisation
WWII	World War Two

Contents

Part 1

The Conceptual and Analytical Framework

Chapter 1
Introduction

1.1 The Conceptual Framework

The study is concerned with the organisation and regulation of supply linkages between farmers and food processors, and related power relations in the UK Agro-Food System (AFS) between 1947 – 2001. Previous research has suggested that during this period, the UK AFS developed in accordance with two different Food Regimes (see Atkins and Bowler 2001; Ilbery and Bowler 1998). In a similar way to the conceptualisation of capitalist regimes of accumulation more generally, the concept of Food Regimes was developed (by Harriet Friedman) as a means to understand capitalist accumulation in AFS production and supply relations (see Friedmann 1982; Friedmann and McMichael 1989; Whatmore 1994). There is some agreement in the existing literature that there have been three Food Regimes between the 1800s and the present day (see Atkins and Bowler 2001; Ilbery 1998; LeHeron and Roche 1995; McKenna *et al.* 1998; Pritchard 1998). This thesis is concerned solely with the 2nd and 3rd Food Regimes.

Food Regimes are conceptual tools that serve the same purpose as the concept of regimes of capitalist accumulation more broadly. The 2nd and 3rd Food Regimes have similar Modes of Social Regulation (MSR) to the Fordist and post-Fordist regimes of advanced capitalist accumulation (see Atkins and Bowler 2001). MSRs organise and regulate the socio-economic relations in systems that are specific to a particular location and period of time. The Fordist MSR, like the 2nd Food Regime MSR is, very briefly, based upon the mass production of standard products in low cost, high output systems (see Bryson and Henry 2001; Holly 1996; Léborgne and Lipietz 1991). In contrast, the literature records that the MSR which shapes the socio-economic relations in the UK AFS, during the 3rd Food Regime, are based upon flexible relationships that respond to highly dynamic consumer demand in a cost effective and innovative way (see Atkins and Bowler 2001; Ilbery and Bowler 1998). This is similar to the MSR of post-Fordism (see Bryson and Henry 2001).

The parallels between the MSRs of the Fordist and 2nd Food Regime, and the post-Fordist and 3rd Food Regime have, to date, undergone comparatively little empirical scrutiny. It is,

however, a key concern of this study, which takes a Regulation Theory (RT) approach to studying supply linkages and power relations in the UK AFS between 1947 – 2001.

RT is used to analyse capitalist regimes of accumulation from a systems perspective (Jones 1997), focusing on the social relations that comprise them, in order to understand how they function as they do (DiGiovanni 1996). According to RT, at any given point in time, each and every economic system at every level of regulation has its own sets of social relations that make up its MSR. The MSR is thus determined by and through the predominant institutions and actors that participate in a regime (see DiGiovanni 1996). It determines the short and long term outcome(s) of a regime (Gibbs 1996; Wilkinson 1997). From that perspective, the 2nd and 3rd Food Regimes comprise distinct sets of social relations that are the product of, and contribute to, the organisation and regulation of production and supply linkages in the AFS. For example, previous research (for example, see Atkins and Bowler 2001) has suggested that:

- During the 2nd Food Regime, supply linkages and production relations were concentrated around vertically integrated production structures that often spanned a number of countries and which were controlled by a centralised head office / decision making unit.
- During the 3rd Food Regime, supply linkages and production relations are based upon a myriad of different types of organisational structures that are primarily concerned with flexible relations, involving enterprises that are able to collectively respond to changes in consumer demand.

There are thus some differences between the reported MSRs of the 2nd and 3rd Food regimes. The crisis of the Fordist regime was the MSR of the Fordist regime itself (see Bryson and Henry 2001; Holly 1996). Similarly, theoretical accounts of change in the MSR of the advanced capitalist UK AFS (for example see Atkins and Bowler 2001; Ilbery and Bowler 1998) suggest that the MSR of the 2nd Food Regime was the cause of its downfall and substitution by a 3rd Food regime. That is to say, the intensive application of capital to the AFS to sustain and enhance the industrialisation of agro-food production and supply activities became less appropriate as EU food surpluses developed in the early 1980s. Consumers, and the general public, subsequently began to voice criticism of the industrialised AFS that was at the heart of the 2nd Food Regime. This consumer dissatisfaction was evident in growing demand for internationally procured, different,

organic, animal welfare friendly, and local foods (see Atkins and Bowler 2001; Gilg and Battershill 1998, 2000; Street 1990; Tovey 1997). In view of this, it is no longer necessary for uniform arrangement of production relations for the end market (see Lahidji 1998). Thus, the literature suggests that the MSR of the 3rd Food Regime is broadly the same as that of post-Fordism, based principally upon flexible and market responsive production and supply linkages (see Atkins and Bowler 2001; Ilbery 1998).

To date, there has however been little attempt to explore the similarities or differences between the MSRs of the 2nd and 3rd Food Regimes. This study therefore adopts the RT approach to an empirical exploration and investigation of that. In so doing, it reflects on the factors affecting the actual supply linkage organisation and regulation between farmers and food processors to conceptualise how and why they are organised and regulated as they are.

Another fundamental element of the study is an in-depth exploration of the role of the region in the organisation and regulation of the food processor and farmer samples' supply linkages. The administrative region and particular localities have emerged as the primary basis for contemporary economic development in the developed world under post-Fordism (Cooke 1996; Murdoch *et al.* 2003; Storper and Scott 1992). Fordism marginalised some areas of the world from mainstream economic activity (see Bryson and Henry 2001; Holly 1996), but post-Fordism is said to have benefited a number of urban and rural sub-national regions that were not central to the Fordist approach to industrial organisation (see Storper and Scott 2003). This has been possible through the use of alternative approaches to industrial organisation and management. These include, for example, geographically concentrated networks of supply linkages that are based upon informal agreements and sub-contractual relations between suppliers and end customers, located within a specific geographical area that is often referred to as 'the region' (see Cooke 1996; Holly 1996; MacLeod2001a, 2001b; Murdoch *et al.* 2003; Saraceno 1994). Such work has however been criticised for its over simplified conceptualisation of the region (see MacKinnon *et al.* 2002). Indeed, this body of literature often uses the term 'region' interchangeably to refer to, for example, an area of the world, a sub-national area, and / or a particular locality.

This study however uses the region to conceptualise a particular sub-national area within an administrative region of the UK where there is a concentration of farmers and food processors, some of whom are known to be connected via ingredients supply linkages. Regionalised, or geographically concentrated, supply linkages have been more frequently used in the UK since the late 1990s (for example, see Atkins and Bowler 2001; Tovey 1997). What is more, following Foot and Mouth in the UK in 2001, agro-food policy makers in the UK have advocated the use and development of more regionally and locally organised supply linkages between farmers and smaller food processors (for example, see Policy Commission 2002). Such an agenda is being pursued in the hope of making opportunities for development in the UK AFS more sustainable and evenly distributed between participants in the AFS. The actual or potential viability and sustainability of such a mode of supply linkage organisation and regulation has however not yet been explored from the perspectives of farmers and food processors.

Literature reports that farmers and food processors were largely marginalised by, and unable to influence, the MSR of the 2nd Food Regime, and it remains to be seen whether they can become more able to influence and participate in the MSR of the 3rd Food Regime (if, indeed, one does currently exist over and above the MSR of the 2nd Food Regime). This study seeks to contribute new, case study based, understandings to that debate. It does this, first of all, by exploring how a sample of farmers and food processors relate to the sub-national region in which they are located. It subsequently seeks to understand how and whether the regional supply linkage model that is said to underpin some post-Fordist supply linkage organisation and regulation (for example, see Bryson and Henry 2001) is, from their perspectives, hypothetically, appropriate and viable for the UK AFS.

1.2 Research Objectives

Four research objectives were developed from the conceptual framework that is very briefly summarised in 1.1 and elaborated upon in Chapter 2. These are:

1. To explore the concepts of regimes of accumulation under advanced capitalism in the context of the UK AFS, with particular reference to the notion of Food Regimes and the 3rd Food Regime in terms of actual food processor and farmer experiences.
2. To investigate how a sample of food processors and farmers currently relate to and use resources within the region in which they are located to assist with business continuity and management.

3. To investigate a sample of food processors' and farmers' personal perceptions of the potential viability of a hypothetical regional supply network model in the UK AFS.
4. To compare theories about who or what has the ability to influence how supply linkages are organised and regulated in the UK AFS (who has power in the UK AFS) by comparing empirical evidence from a sample of food processors and farmers with existing theory.

1.3 Study Area

North Cumbria, a relatively remote area in the North West region of England, was the study area. A sample comprised of three multisite food processors (MSFPs), nine SME food processors, and 11 dairy farmers and six livestock farmers (who, respectively, supplied to one of the MSFP and one of the SME food processors in the sample) was selected. The sample was comprised thus for a number of reasons:

- Each of the four different 'subgroups' of AFS participants in the sample have been characterised as being unable to substantially influence the MSR of the AFS.
- To enable comparison of different sized food processors, different types of farmers, and a cross case comparison of each of the four 'sub-groups'.
- To allow exploration of the factors affecting, and mode of, the nature and form of supply linkage organisation and regulation between geographically proximate farmers and food processors.

North Cumbria was selected in view of its relatively remote location in England, because it is predominantly rural, and since it is the home of a number of large and small food processors and a large number of farmers. In addition, the AFS is an important feature of the Cumbrian economy as whole and north Cumbria hosts a large proportion of the county's total AFS activity. Across the county of Cumbria as a whole, food and drink is the largest manufacturing sub-sector (Peck *et al.* 2000) and farming covered 454,922 hectares of land in 1999 (MAFF, 2001).

1.4 Data Collection and Analysis

The study used a semi-structured in-depth qualitative interview methodology to meet the research objectives. Qualitative methods do not seek to determine statistical significance or patterns (Denzin and Lincoln 1994; Patton 1990; Stake 1981, 1995). Instead, they facilitate research that,

. . . *attempts to understand the meaning or nature of experience of persons* . . . (or to) *explore substantive areas about which little is known or about which much is known to gain novel understandings* ... (Strauss and Corbin 1998:11).

What is more,

. . . [they] *permit the* [researcher] . . . *to study selected issues in depth and detail* . . . [and] *typically produce a wealth of detailed information about a much smaller number of people and cases* [than quantitative research methods] . . . *This increases the understanding of the cases and situations studied but reduces generaliseability* (Patton 1990: 13-14).

Qualitative methods were therefore entirely appropriate for this study, the structure of which is briefly described below.

1.5 The Structure of the Thesis

The thesis is divided into three sections and eight chapters. First of all the conceptual and analytical approach is described in Part I. The empirical case study findings are detailed in Part II. Then, in Part III, the key case study findings are synthesised and considered in relation to existing knowledge, potential future research opportunities and AFS policy.

Chapter 2
The Conceptual Framework: a Literature Review

2.1 Introduction

This chapter develops the conceptual framework for the study. It provides a basis for the design of empirical work on the characteristics of supply linkages and power relations in, and the current role and significance of, regional networks in the agro-food sector.

First of all, the Regulation Theory (RT) approach to understanding socio economic change under capitalism is discussed in section 2.2. The origins of RT are detailed, and then the Mode of Social Regulation (MSR) and other core tenets of RT are discussed. RT holds that at any given point in time, each and every economic regime or system, at an international, national, and / or sub-national level is governed by an MSR - a way of ordering and conducting socio-economic relations (see DiGiovanni 1996; Gibbs 1996; Goodwin *et al.* 1995; Jones 1997)). Following this, there is assessment of the possible need for modification of the RT approach to enable a more explicit analysis of regional and local regulation of supply linkages in the UK AFS.

Section 2.3 briefly discusses how twentieth Century writers have conceptualised the region in different ways and how the region is currently being used as the basis for much contemporary economic development. The concept of the region is then explored with particular reference to rurality and the region.

Next, section 2.4 reviews theory about the respective MSRs, and impacts of, advanced capitalist regimes of accumulation. Fordism, post-Fordism and the concept of Food Regimes are discussed in terms of how they were sustained and suffered crises. Of particular interest in this section is the concept of Food Regimes, which was developed as a means to understand capitalist accumulation in the developed world's agro-food production and supply relations

(see Friedmann 1982; Friedmann and McMichael 1989; Whatmore 1994). The literature suggests (for example, see Ilbery and Bowler 1998) that there have been three Food Regimes, and that the 2nd and 3rd Food Regimes exist virtually concurrently with, and have broadly similar MSRs to, Fordism and post-Fordism respectively. That theory is discussed in order to draw out the similarities and differences between generic industrial and AFS specific regimes of advanced capitalist accumulation. Using the RT approach, the impacts of the MSR of the 2nd and 3rd Food Regimes upon the organisation and regulation of supply linkages in the UK AFS between 1947 – 2001 are then critically reviewed in section 2.5.

The development of the conceptual framework of a regional supply model is then discussed in section 2.6. This model of industrial organisation and regulation is currently a popular AFS, and general economic, development policy tool. It is seen as a way to bring about less uneven development within, and across, the UK AFS, particularly post FMD 2001 (see Policy Commission 2002). To date however, there has been no critical analysis of the viability of this approach to the development of the UK AFS.

The chapter closes with a set of six hypotheses, developed from a summary of the key issues within the conceptual framework. These hypotheses provide the framework for cross case analysis, and synthesis, of the study findings in Chapters 4 - 7. They also underpin the conclusions presented in Chapter 8.

2.2 Regulation Theory

Regulation Theory (RT) was,

> . . . *developed as an attempt to explain* . . . [how] ***crises occurred constantly under capitalism as a normal outcome of capital accumulation. Further, it is the crises themselves, and their subsequent resolution, which provide for dynamic change and accumulation under capitalism*** (DiGiovanni 1996: 375) [emphasis added].

The roots of RT lay within the Marxist analysis of labour processes, and interpretations of the role of the State in managing labour-capital relations. RT suggests that capitalist development is uneven over time and space as relations between labour-capital-State are applied in an

economic system or regime. Labour-capital-State relations periodically suffer crises though, and, during these crises, RT posits that State intervention in the system effects change to the way in which labour and capital is applied, to ensure returns to capital. Changes in the way, and extent to which, the State intervenes in labour–capital relations impacts upon the sustainability of a prevailing economic regime or system, and can encourage transition to a new regime. Put simply, it can encourage a different way for labour and capital to relate to one another in an economic system. RT thus focuses on the social relations that underpin an economic system or regime in order to develop an understanding of how labour, capital and the State relate to one another in that regime or system (DiGiovanni 1996; Gibbs 1996; Goodwin *et al.* 1995; Jones 1997). Taking this into account, Smith (1995:71) argues that,

(t)*he value of regulation theory lies in: (1) its concern to identify sets of abstract social relations which structure societies (relations between capitals, between wage labour and capital and between capital and the State) . . . (2) the tracing of how these social relations are embodied at intermediate levels in* ***regimes of accumulation*** *and* ***modes of regulation*** *. . . (3) the ability to locate distinct industrial economies within these structures . . . and (4) the possibility of there being divergent strategies that compose a societal structure . . . and that these strategies are spatially constituted...* [emphasis in original].

Section 2.2.1 describes how these attributes are evident in the application of the RT approach.

2.2.1 Applying the RT Approach

RT rejects the neo-classical economic perspective that the conditions for capitalist development are miraculously created (see MacLeod 2001a, 2001b), and can help provide an understanding of the complex, multifaceted structure and composition of a regime's MSR (see Jessop 1995). Furthermore, Liodakis (1997) supports its use in studies of contemporary agrarian change. According to RT, at any given point in time, each and every economic regime or system at an international, national, and / or local scale is comprised of specific social relations that make up its Mode of Social Regulation (MSR) (see Peck and Tickell 1992; Tickell and Peck 1992; Goodwin *et al.* 1995; Smith 1995; DiGiovanni 1996). A number of writers have considered precisely what an MSR is (for example, see Drummond and Marsden 1995; Gibbs 1996; DiGiovanni 1996; Goodwin *et al.* 1995; Smith 1995; Wilkinson

1997). From a review of this literature, it is apparent that the key characteristics of an MSR are that it is:

- the institutionalised social, economic and cultural compromises that operate at different spatial scales, around different sets of institutions;
- neither predetermined nor static, but constantly evolving as a result of social relations in a particular system over time; and, it is
- promoted and challenged by different sets of social groupings to enable capitalist accumulation, and determine current and prospective institutional arrangements.

Analysis of a regime's MSR reveals the nature of labour-capital-State relations which comprise and underpin a regime. The MSR of a system or regime is traditionally analysed by evaluating three different levels of regulation: national accumulation; international regulation; and, the State and political factors (Goodwin *et al.* 1995; Jones 1997). Such an approach has been accepted as a valid way to understand contemporary change in social and economic geography. For example, Storper and Scott (1992) assert:

Regulationist theory provides us with a view of economic history as a ***chain of distinctive periods, together with a concept of the multilayered and political character of capitalist accumulation****. These periods are defined by* ***specific economic practices consisting of dominant sets of production relations*** *. . . complemented* ***by different political and quasi-political arrangements which coordinate the economy****. Such practices are institutionalised when an effective coalition, or historical bloc, is constructed which is capable of putting together and maintaining a specific set of social compromises. Regulationist theory* [identifies with] *the specificity of the mass production system . . . as the marriage of a technological paradigm of production with Keynesian . . . institutions . . .* [and] *permits us to ask how* [post-Fordist] *production systems . . . are different from those* [under Fordism] . . . (Storper and Scott *ibid.*: 4-5) (emphasis added).

Using the RT approach, this study seeks to establish a deeper understanding of the MSR of the UK AFS at a regional level. This follows MacLeod (2001a: 820 - 823) who recently voiced strong support for using RT to critically investigate the study of regional development. He asserts:

(R)*ecent formulations of . . .* [RT that conceptualise sub-national regulation] *might offer a deeper sense of the current recasting of social, economic and political forms while*

simultaneously alerting us to their alarmingly uneven economic geographies and sociologies... (MacLeod 2001a: 820 - 823).

Despite such support for its application to geographical studies of social and economic change, RT has been criticised (see Barnes 1996; Gibson-Graham 1996) as an insubstantial and incomplete theoretical approach to understanding social and economic restructuring (see Goodwin *et al.* 1995; Jessop 1995; Liodakis 1997; Wilkinson 1997). Jones (1997), however, argues that studying the MSR of a regime in a particular time and location can facilitate in-depth, abstract analysis of a regime, and Peck (2000 in Ward 2001:131) asserts that RT, thus, reveals the,

. . . intertwining of economic and extra-economic factors in the institutionally embedded and socially regularised process of capitalist development.

While a number of writers (for example see, MacLeod 2001a, 2001b) accept that RT cannot 'predict' actual outcomes, they do suggest that it can be used to interpret actual changes without denying that other outcomes might have been possible. To that end, there have been calls for the RT approach to consider the relationships that generally regulate and organise contemporary society and the economy. These are regional and local governance mechanisms, activities and structures and government's position therein. Such analysis is at the core of this study and the RT perspective has therefore been adopted for this study. This study is concerned with understanding the role of the region in the organisation and regulation of supply linkages in the UK AFS. In view of that, the use of RT to understand the concept of the region is discussed below.

2.2.2 Using RT to understand the Region

While the merits of RT for analysing uneven development have been debated, some of the notions associated with these theoretical debates (for example industrial districts) have been absorbed into policy making rather uncritically and have shaped some aspects of regional

policy. Regional development is however by no means a new concept (see McCrone 1976), and the organisation of economic development in the administrative regions of the UK[1] has become more significant since the passing of the Regional Development Agencies Act 1998[2], at a time of intense global economic activity. Gough (2003; also see, Scott and Storper 2003) notes how this represents a change in emphasis in England. He states:

> *The previous form of regional policy in England, dating back to the 1930s, was centrally controlled, regionally differentiated subsidies and spending . . . substantial State economic regulation formally controlled from within the region and carried out at the regional scale has not existed before in England* (Gough 2003: 23-24).

Globalisation of the economy and the way in which that economic process has 'hollowed out' the State has made regional development policy and governance more significant in terms of contemporary organisation and regulation of the economy (Hudson 2003). A notable manifestation of this process concerns the way in which national Governments are now passing control up to the international (and / or European) level, and down to the sub-national regional scale, stimulating an uneven regional distribution of economic development opportunities and outcomes (see Hudson 2003; Lipietz 1997).

Devolution of British Parliament to the regions (for example, see ODPM 2004) suggests that regionalisation of economic development organisation and regulation will continue. Specifically in terms of UK AFS development, the Policy Commission (2002) acknowledges that regionalised agro-food policy is potentially valuable, and Government responses to the Policy Commission suggest their acceptance of it as a way forward, with Government Offices for the regions playing key roles in the implementation of such policies.

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[1] The Regional Development Agencies Act 1998 defines the English regions thus: East Midlands; Eastern; London; North East; North West; South East; South West; West Midlands; Yorkshire and the Humber. The organisation and regulation of urban and rural production and supply systems[1] in the UK are increasingly overseen by the Government Offices for the Regions and the Regional Development Agencies (RDAs) (HMSO 1998).

[2] See http://www.hmso.gov.uk/acts/acts1998/19980045.htm.

Regionalised development of the UK AFS appears, however, to have been accepted without critical question as a way to confront and resolve the multiple crises facing the contemporary UK AFS. There have been few critical political or academic investigations of the potential viability, and impact, of regionalised UK AFS development. The way in which economic development is organised and regulated in a particular location impacts on the outcome of economic activity or development in that location. Indeed, some writers have suggested that regionalised economic activity can lead to uneven economic development within sub-national regions, nationally, and internationally (see Hudson 2003; Scott and Storper 2003).

In sum, there is no consensus of opinion about whether regionalised economic linkages are beneficial, evenly distributed, and sustainable at all scales of economic activity. Moreover, and of specific import to this study, there is little evidence to support the theory that the regionalisation of UK AFS supply linkages would be positive and sustainable. Consequently, there is need for a critical evaluation of the concept of regional development specifically in relation to the UK AFS. To that end, the RT approach has been adopted by this study to analyse social and economic change in the UK AFS between 1947-2001. The purpose is to increase understanding of the role played by labour-capital-State relations in a specific location, and at particular scales of activity. The study was carried out in North Cumbria, which, for the empirical element of the study, is conceptualised as a region. The region and the differentiated regional geographies of development under advanced capitalism in the UK AFS, and the economy more generally are discussed in sections 2.3 – 2.5 in order to provide a conceptual framework for this work. Then, in Chapter 3, the AFS of the study area of North Cumbria is described.

2.3 The Region

The concept of the region has a long established, yet debated, position in geography (Murdoch *et al.* 2003). Agnew *et al.* (1996) have detailed how, over time, the region has been used as a means of organising and conceptualising, the character of politics, the economy, the physical and natural environment, and society at a sub-national level. The region has thus been

conceptualised in many different ways and has generated a huge literature (Peet 1989; Bryson and Henry 2001; Agnew *et al.* 1996; Massey 1984, 1995, 1996; Keating, 1998 in MacLeod 2001a; Scott and Storper, 2003).

In the context of this thesis, it is of particular interest however that Massey (1984) suggests that, following the crisis of Fordism in the late 1970s (see section 2.4.1), increased competition across national boundaries led to production processes being less organised within regions (as they had been under Fordism) than across them. She linked this spatial division of labour to the way in which labour was organised across regions, as a result of historical patterns of regional investment and related social structures. Massey (1996) notes that the net result of this is regional inequalities in economic development and social well-being. This study was concerned with the unequal distribution of development opportunities in the UK. It sought to understand whether, and how, more evenly distributed, contemporary AFS development can be stimulated in a predominantly rural region in the UK through the use of a regional supply linkage network model.

Murdoch *et al.* (2003:18) note that the concept of regional economic development has attracted much attention in recent years. They state,

(a)*lthough the term 'region' is often hard to define, this spatial scale appears to be gaining new significance for economists, sociologists, political scientists and geographers.*

Moreover, they (*ibid.*) suggest that the idea of the region is becoming more important in Europe as units of organisation of social, political and economic life and that in academic literature, there are now three main dimensions to the regionalisation debate. These are:

- Economic geographers have noted that new economic structures are 'congealing' at the sub-national level. These structures tend to cover areas that are more than 'local' but less than 'national'. They do not however equate to the same territorial zone in every instance. In this context, Murdoch *et al.* (2003:18) note that the term 'region' is being used to describe, *"new industrial agglomerations in which firms and associated institutions cluster together in space".*

- Recent political and administrative changes, notably including a shift towards multi-level governance structures, appear to highlight the significance of the regional tier. In the UK, this is evident in the devolution to Scotland, Wales and Northern Ireland and the creation of the Regional Development Agencies (RDAs). In this context, Murdoch *et al.* (2003:18-19) note that the region has, "*gained the potential to become a more autonomous policy-making arena*" and has led to demands for further devolution to elected regional assemblies.

- Finally, Murdoch et al. (2003:19) note that social relations have become 'regionalised' as, "*people become more aware of regions as economic and political entities and orchestrate their lives across regional space*".

The region is thus difficult to define, and MacKinnon *et al.* (2002) have suggested that many writers take the concept of a region for granted. They (*ibid.*) have therefore called for more in-depth analysis of regions and their role in socio-economic development. Since the UK AFS is partly reliant on a primary industry (farming) that typically occurs in a rural area, the extent to which the rurality of a region affects a location's potential, and actual, economic development is of particular concern to this study.

2.3.1 The Region and Rurality

Most UK farmers and many SME food processors are located in rural areas and most of North Cumbria is rural. In the movement from a Fordist to a post-Fordist MSR it is feasible that a change in the relative balance of advantage has taken place in favour of rural areas. Murdoch *et al.* (2003: 8 - 19) explain:

" (The) *emergence of more strongly competing claims on the countryside can be linked to broader patterns of economic and social change, notably the decline of national economic and social structures, and the emergence of much more complex networks and flows across territories . . . Any given rural area is* [now] *constituted by economic, political and social processes operating at transnational, national, regional and local scales. These processes combine in differing regions and localities. . . .*

They (*ibid.*) continue to explain that the,

". . . ***economies of rural areas therefore become increasingly tied into regional patterns of development*** . . . [and] *rural areas located a long way from the main urban markets often experience great problems in generating any kind of dynamic growth. Yet, even these areas*

have seen changes in the structures of their economies . . . [which] *can stem from firms and networks that utilise local resources in innovative ways . . .*" (Murdoch *et al.* 2003:20-21) [emphasis added].

Other writers have, similarly, suggested that spatially agglomerated, flexible production systems can provide opportunities for largely rural regions, which were peripheral under Fordism, to be better integrated into the global economy (see Cooke 1996; Holly 1996; MacLeod 2001a, 2001b; Murdoch *et al.* 2003; Saraceno 1994; Scott and Storper 2003; Storper and Scott 1992). To date though, there has been little in-depth and critical analysis of the development experiences and potential of predominantly rural regions and industrial sectors such as the AFS which are typical of rural areas. More in-depth critical enquiry is therefore required in order to understand what potential there is for rural regional development under post-Fordism. Murdoch *et al.* (2003) call for such work to be undertaken and suggest that a social networks approach, which couples a micro scale analysis with a more abstract and broader analysis of social, economic and political change should be adopted for that.

In summary, the region has always been an important concept in geographical studies and its interpretation has changed in recent years. It would appear that regions now play a more distinctive, and less passive, role in the interpretation of economic change. In the literature, the use of a constructivist (MacLeod 2001a) or network (see Murdoch *et al.* 2003) approach to social inquiry, to theorise the concepts of the region and its role in the economic development process, has been advocated. This approach has recently been supported since it helps develop understanding of particular socio-spatial relations, in a particular location, and at a specific time. Exploration of the concept of the region and regional development in this way is important for a number of reasons, the most crucial of these for this study is the trend towards regionalised industrial organisation and regulation in the UK generally, and the UK AFS specifically. The following section details how this situation has come about. First of all, the two dominant advanced capitalist regimes of accumulation – Fordism and post-Fordism - are described. This provides a vital context for the development of ideas about the changing nature of the relationship between labour-capital and the State under advanced capitalism. To

illustrate that, the next section also articulates the differentiated regional geographies of development under Fordism and post-Fordism.

2.4 Regimes of Advanced Capitalist Accumulation: Fordism and post-Fordism

Economic geographers generally concur that two different regimes of capitalist accumulation have prevailed in the second half of the twentieth Century: Fordism and post-Fordism. As discussed in 2.2, an economic regime is identifiable and distinguishable by the way labour-capital and State relations are organised, undertaken, or used in a certain location and time. It is generally agreed that Fordism and post-Fordism have differentially impacted upon the way in which advanced labour-capital and State relations have been organised, conducted and regulated during the latter half of the twentieth Century (see Holly 1996; MacLeod 2001a; Cooke 1996; Storper and Scott 1992). It should be noted that in the literature there is more agreement about what constitutes Fordism in comparison with what constitutes post-Fordism. To elaborate upon this, Fordism, post-Fordism and their respective associated MSRs are discussed in-depth below.

2.4.1 Fordism

Fordism has been conceptualised as a general organising principle of labour, a macroeconomic structure, and a system of rules (see Lipietz 1997). The Fordist MSR enabled and encouraged the organisation and use of labour-capital-State relations to allow large companies to become bigger, achieve economies of scale, and serve mass consumer markets more easily and cost effectively with standardised products. This approach to economic development has become known as 'demand management', 'pulling' resources into industrial production and supply systems. Under Fordism, this model of economic development was based on salaries set in the domestic markets of regions in North West Europe, the US and Japan (see Lipietz 1997). These sub-global regions became centres of mass production under Fordism, and, in the period up to the 1960s, they provided easy access to cheap resources and markets and reasonably well paid, but monotonous, jobs for the local workforce (also see Bryson and Henry 2001; Holly 1996).

The MSRs (Storper and Scott 1992) of regimes of capitalist accumulation can however only underpin and sustain them until external shocks destroy them. A series of economic upheavals in the global economy in the 1970s challenged the relatively inflexible MSR of Fordism. Demand for the use of developed countries' labour fell as the relative competitive advantages between the US, North West Europe, and Japan levelled out. The search for economies of scale led to the internationalisation of productive processes and markets from the Southern Hemisphere. Those regions that were successful under Fordism sought to overturn labour regulations by sub-contracting out activities to countries and regions that had not experienced Fordist approaches to the application of capital and labour previously. By the end of the 1970s there was a global slowing down of productivity, increasing labour costs, and an increase in the price of commodities. Supply side relations in the global market place subsequently, and logically, became the focus of economic development work (see Bryson and Henry 2001; Lipietz 1997). These changes to the organisation and use of labour-capital and State relations reduced the potential for effective *national* management of capitalist accumulation and threatened the continuity of Fordist approaches to economic development (see Harrison 1994; Léborgne and Lipietz 1991).

The crisis of Fordism has thus come to be seen as a crossroads in the historical development of capitalism (Bryson and Henry 2001; Holly 1996). It stimulated an overall weakening of organised labour, and a turn towards very different, more *ad hoc* and flexible use of non-conventional modes of production organisation and regulation. It also signalled the emergence of a new international division of labour. In sum, it has,

> *...engendered many changes in the countries of the developed world. Some have privileged flexibility, while others have stressed the mobilisation of human resources. The* [Newly Industrialising Countries (NICs)] *have accentuated their competitiveness and specialised amongst themselves. The result has been a vast reshaping of the world's economic hierarchy . . .* [There is now a] *co-existence of countries with differing labour regimes within an integrated continental bloc* (Lipietz 1997:2).

In particular, following the crisis of Fordism, the role played by the Nation State in economic change and development has reduced dramatically in comparison with the role it played during Fordism (Goodwin *et al.* 1995). Following the crisis of Fordism, the State began a process of 'hollowing out' its responsibilities for industrial organisation and regulation. This

involved passing control for more flexible use of labour and capital up to global companies and international governments, as well as down to different sub-global regions of the world (for example, Northern Europe and the US) (Jessop 2000). The following section briefly describes the diverse experiences that the crisis of Fordism has brought about, which have collectively come to be known as post-Fordist economic development. There appears to have been no single way of organising and regulating economic activity following the crisis of Fordism, and there continues to be a number of ways in which contemporary State-labour-capital relations are organised in space and time. These are briefly summarised with particular reference to how the region has played a key part in many approaches to economic development and industrial organisation and regulation after the crisis of Fordism.

2.4.2 Post-Fordism

As discussed above, there is a general consensus about the nature of the crisis of Fordism, but relatively little agreement about what has followed Fordism. For examples of the variation in understanding and conceptualisation about post-Fordist industrial organisation and regulation see: Cooke (1996); Holly (1996); Hudson (2003); MacLeod (2001a, 2001b); Piore and Sabel (1984); Porter (2003); and, Scott and Storper (2003). Jones (1997) has however attempted to clarify the situation, by explaining that:

> (t)*he basis of the post-Fordist debate is that Fordist mass production . . . has been* ***replaced by flexible production, anchored around a "[re]organisation of society within the State"*** *. . . Keynesian socioinstitutional structures are being replaced by entrepreneurial State forms, privatised forms of consumption, and post-Fordist institutional ensembles* . . . (Jones 1997:835) [emphasis added].

Moreover, Lipietz (1997) has explained that post-Fordism is based around two principal trajectories of labour-capital-State relations:

- The attainment of external flexibility associated with direct hierarchical control. Industry is organised as per Fordism. Low levels of State involvement means however that the social benefits (of high employment and easy access to a mass market of standardised products for all) available under Fordism are not necessarily available.
- The rigid use of external labour involving negotiation of a contract for labour use between producers and labour providers to maximise external flexibility.

At a micro scale of analysis, Bryson and Henry (2001) suggest that the post-Fordist MSR is generally based on the following, supply side features:

- the use of information technologies and flexible and decentralised forms of labour processes and work organisation;
- a decline in the old manufacturing base and the growth of the service sector;
- the hiving off or contracting out of functions and services; emphasising choice and product differentiation; and,
- marketing and targeting consumers by, for example, lifestyle and culture.

In addition to a lack of consensus about the MSR of post-Fordism, there is also a lack of consensus about how industrial production and supply relations are organised and regulated. For example, Bryson and Henry (2001) have outlined that three different, co-existing, models of labour-capital -State relation organisation have emerged following the crisis of Fordism. These are:

- Flexible specialisation, characterised by the use of simple, flexible tools and machinery and non-standardised components by highly skilled labourers involved in highly integrated customer – supplier relations with physically proximate suppliers, leading to low volume and differentiated outputs.
- Fordist mass production, characterised by complex, rigid, single purpose machinery, using relatively standardised components involving narrowly skilled professionals and semi-/ un-skilled workers to execute simple, repetitive, highly controlled production systems, based on arms length supplier relations with high stock inventory levels as buffers against failed production runs, leading to the high volume production of standardised products with very low levels of differentiation.
- Japanese flexible production, involving highly flexible, modular, methods of production using relatively easy to switch products managed by multi-skilled, flexible workers with some responsibilities, operating in teams and switching between tasks, based around very close supplier relations in a tiered system with just in time delivery of stocks and a close supplier network, resulting in very high volume production of a differentiated range of products.

There appears, therefore, to be no singular, definitive agreement on the form of labour-capital-State relations after the crisis of Fordism in the late 1970s. Notably though, the new 'core

production regions' under post- Fordism generally tend to be those that were either peripheral to economic development under Fordism, or previously locked into Fordist systems on the basis of unequal relationships (Bryson and Henry 2001; Hudson 2003).

Taking this into account, writers have suggested that, as with Fordism, economic development under post-Fordism has an uneven regional distribution (see Hudson 2003; Scott and Storper 2003). It has been suggested that this situation has arisen because regions have different relative degrees of competitive advantage due to the opportunities created by the dissolution of mass markets, increased demand for niche products, and increased global competition after the crisis of Fordism (Cooke 1996; Holly 1996). Other reasons may include the fact that individual regions with an ability to meet industrial demands will benefit over others that cannot. In addition, competitive and successful regions under post-Fordism are often insulated from highly unionised labour forces, involved in collective bargaining and closely defined tasks as a result of a lack of historical industrialisation. Storper and Scott (1992) also suggest that, following the crisis of Fordism, successful regions comprise flexible and *ad hoc*, creative and interpersonal relationships and 'untraded interdependencies' (Storper and Scott 1992) that provide a region with its structural integrity.

Untraded interdependencies - the region's specific social, economic, political and cultural assets that emerge from public organisations alongside locally derived customs and rules of action – are a widely theorised concept (for example, see MacLeod 2001a, 2001b; Piore and Sabel 1984; Scott and Storper 2003; Storper 1995; Storper and Scott 1992). These assets can be tangible (for example, a small firm with a high quality, differentiated product range) or intangible (for example, skills, knowledge, flexible approaches to working, market awareness). Some writers suggest that these assets are location and time dependent and cannot be easily transferred between regions (see Becattini 1990; MacKinnon *et al.* 2002; Storper 1997). Porter (2003) suggests that they are what enable a region to function and be more, or less, competitive under post-Fordism. This study's use of the RT approach to analysing social and economic change in the UK AFS between 1947 – 2001 will contribute to that debate. In particular, by focusing on the role played by labour-capital and State relations in a specific location at different scales of operation (the micro level of individual enterprise case studies,

the meso level of the (sub-national) region's AFS, and the macro level of the national UK AFS).

Other accounts of post-Fordism suggest that successful flexible production systems are based around supply and production relations between SMEs, and that regions with a large population of craft based SMEs have a potential comparative advantage over those that do not. Bryson and Henry (2001) accept that SMEs have boomed since the crisis of Fordism in the mid 1970s, and have contributed to the development of the most dynamic centres of economic growth worldwide since then (also see Cooke 1996; Holly 1996). They also note that there has been a concurrent increase in the number of multinational companies (MNCs) entering into more flexible production and supply linkages following the crisis of Fordism. Such changes have contributed to the consolidation of a new international division of labour. That division if labour is based on the spatial separation (often at a global scale) of MNCs' advanced managerial and technology activities and resources from its lower skilled manual, labour intensive, activities and resources (see Bryson and Henry 2001; Cooke 1996; Holly 1996; Phelps 2002; Storper and Scott 1992).

To summarise this section, following the crisis of Fordism, economic development has involved the increasingly flexible use of labour and / or capital, and reduced State intervention in industrial production and supply linkage organisation and regulation (see Bryson and Henry 2001; Hudson 2003; Scott and Storper 2003). Economic development is largely based around either the flexible use of capital, and / or the mobilisation of human resources to enable regions to compete in the global economy. Such changes have stimulated a new international division of labour and uneven regional development opportunities and outcomes (see Hudson 2003; Lipietz 1997). Hudson (2003) suggests that these changing geographies of production can be seen as evidence of a change in the importance of the region to economic development. It is suggested here that this indicates a need for closer, case and location specific investigation of the viability of regional development across industries and regions. What is more, MacLeod (2001a) cautions that if the need for this type of research is not addressed,

. . . *such* [regional development] *policies* . . . [may be] *overlaid on a bed of laggard* ***industrial*** *institutions and structures,*[with] *the net result* . . . [being] *little beyond the public funding of the business breakfasts for local bourgeois elites, such that . . . the impact on a locality's* ***industrial system*** *becomes marginal...* (MacLeod 2001b: 1155) [emphasis in original].

This study acknowledges this argument and has adopted the RT perspective to provide critical empirical insights into the role of the region in previous and future potential AFS development. To assist that, the next section reflects on the use of Food Regimes as a way to conceptualise UK AFS development between 1947 and 2001.

2.4.3 Food Regimes

For the purpose of this study, the 2nd and 3rd Food Regimes are reviewed as concepts that define the organisation and regulation of supply linkages in the UK AFS between 1947 – 2001. Their existence throughout the developed world has not, however, been rigorously investigated. This study seeks however to explore whether the MSRs of the 2nd and 3rd Food Regime are observable in a particular location and in amongst a number of farmer and food processor case studies. The review of the MSRs of the 2nd and 3rd Food Regimes is thus developed as a conceptual framework for analysis of the case study data, the key findings from which are reported in Chapters 4 - 7.

Adapted from concepts developed in RT, Food Regimes theory was developed in the 1980s by Harriet Friedmann as a way to conceptualise trends in capitalist food production and consumption in the North-American AFS (see Friedmann 1982; Friedmann and McMichael 1989; Whatmore 1994). As per the core concept of RT, each Food Regime has a MSR, which frames its existence and development. Figure 2.1 below summarises the MSRs of the 2nd and 3rd Food Regimes that, it has been suggested (see Ilbery 1998), existed between 1920s and the present day. It also illustrates the dominant power relations and Government policies that underpinned the application and use of labour and capital in the UK AFS in accordance with the respective MSRs of the 2nd and 3rd Food Regimes, between 1947 - 2001.

Figure 2.1 The 2nd and 3rd Food Regimes: Timescales, MSRs, Related Policy Objectives and Core Power Relations

Timescale	1940s	1950s	1960s	1970s	1980s	1990s	2000s
Food Regime	**2nd Food Regime**				**3rd Food Regime**		
MSR Characteristics	• Transnational restructuring of agriculture to supply mass market • Decolonisation • Consumerism • Growth of forward and backward linkages from agriculture				• Global restructuring, with financial circuits linking production and consumption • Globalisation of production and consumption • Disintegration of national agro-food capital and State regulation • Green consumers		
Key Features of National Government Policy	• Cheap food policies • Credit expansion • Production control mechanisms • Market creation via concessionary export sales and food aid				• Opposing trends of continued protection and deregulation of the agricultural sector		
Core Power Relations	• State driven and funded industrialisation and concentration of production • Mass markets encourage the development of concentrated supply linkages				• Highly articulate and differentiated consumer demand, as well as persistent demand for affordable food encourages the development of niche products and distribution channels • Reduced State support for agro-food production • MGRs stimulate production and supply relations and supply linkages for the mainstream and mass markets		

(Source: adapted from Ilbery and Bowler 1998).

This work uses the concept of Food Regimes as a framework for analysis of UK AFS supply linkage organisation between 1947 – 2001. Ilbery and Bowler (1998) consider this approach entirely appropriate for such analysis since, Food Regimes,

...[use] *the food-supply system as* . . . [their] *organising framework* . . . [focusing] *on long-run changes in capitalist agriculture* . . . [reasoning that] *progress towards industrialisation has occurred in a series of steps* ... (Ilberry and Bowler 1998: 60).

Food Regimes literature (see Goodman and Redclift 1991; Goodman *et al.* 1987; Jarosz 1996; Whatmore 1994) has therefore,

... *paved the way for work* . . . *[that is]* ***more explanatory*** *rather than descriptive* (LeHeron 1988: 410) [emphasis added].

The literature suggests that between 1947 and 2001 there have been two different Food Regimes, with largely contrasting MSRs. Social, economic, political and cultural norms and changes influenced the development of these different MSRs. The Food Regimes approach appears thus to provide a way to conceptualise and understand the organisation, undertaking, and regulation of supply linkages in the UK AFS at a macro level. For the purpose of this study, such a conceptualisation also enables an analysis of the impact of the 2nd and 3rd Food Regimes upon farmers and food processors. This is set out in section 2.5.

2.5 The UK Agro-Food System

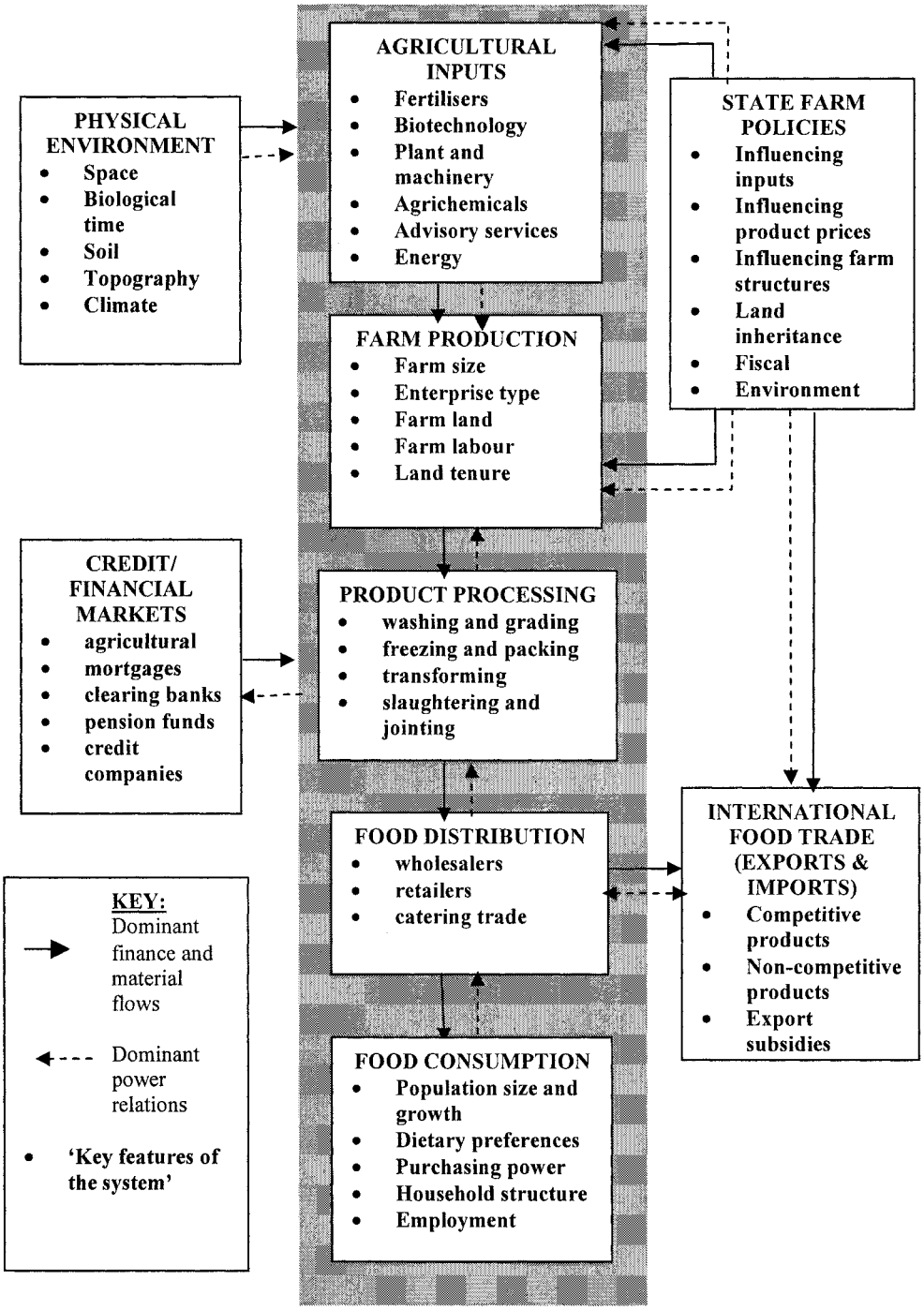
The UK Agro-Food System comprises the production and supply relations and activities that allow food to be produced, traded, used, and consumed in (and by) the UK.

The [agro-] *food system is not static. It is in a state of competition within itself as a system and within the different sectors and industries that constitute the system. Agriculture, manufacture, retailing* [as well as] . . . *distribution, and catering compete over who is to control food...* (Lang and Wiggins 1985: 46).

Figure 2.2 illustrates the composition, organisation, and regulation of the UK AFS. From this, it is clear that numerous supply linkages exist between different sectors and actors in the industrialised AFS and that the AFS is reliant on a number of actors in the system (for example, farmers, retailers, and consumers); capital inputs (finance and capital resources); and, the biophysical environment.

It is important to note that the biophysical environment directly impacts upon the AFS. There is a wealth of agricultural geography literature about its role in the determination of the nature, location and scale of the agriculture sector (for example, see Allanson *et al.* 1994; Grigg 1992). Such writing suggests that the geography of agriculture is generally rather fixed and immovable relative to other economic activities. The biophysical environment is, however, not referenced in the literature as a factor that impacted / impacts upon the MSRs of Fordism and post-Fordism more generally. The biophysical environment would not directly impact on manufacturing per sé, for example car manufacturing which largely depends on manufactured inputs and some natural resources, for example water to cool production systems. In contrast however, the potential for Fordist agricultural and food production is directly affected by changes in the biophysical environment, and the agricultural input industry was developed to provide resources that reduced the impact of climatic factors upon Fordist type food production during the 2nd Food Regime. Public and private capital has been intensively applied to the AFS to develop technology to reduce dependence on labour therein (see 2.5.1 below) and reduce the impact of the biophysical environment in the AFS (see Edwards 1992; Goodman 1999; Tarrant 1975). Clearly, the biophysical environment limits the range of agricultural activities available to a farmer in any given location. Emerging technologies in the field of genetic modification are however likely to reduce the significance of the biophysical environment as barriers to certain types of agricultural production in particular locations that would not ordinarily sustain that production.

Figure 2.2 The UK Agro-Food System (Source: Bowler 1992:12)



It is therefore not simply labour, capital, and State relations that affect capitalist accumulation. The biophysical environment does too, but the Food Regimes literature has not to date considered this to be particularly relevant. It is argued here that adapting the idea to the AFS does need to be considered when the future development of the UK AFS is theorised. The spatial distribution of labour, capital, the State, and biophysical factors and relations in the UK is likely to impact on the potential for capitalist accumulation in the AFS. Due to an uneven distribution of these factors, some regions possess, or are able to gain, comparative advantage over others in terms of the production of some agro-food products. This concept is explored below.

2.5.1 Influences upon Supply Linkage Organisation and Regulation in the UK AFS 1947 - 2001

In this section, the concept of Food Regimes (as illustrated in Figure 2.2 above) is used to structure analysis of change in power relations and supply linkages in the UK AFS between 1947 – 2001. Subsequently, section 2.5.2, focuses on the impact of those changes on farmers and food processors.

In the 20th Century, the State significantly intervened in the structural transformation of the AFS (see Liodakis 1997). In the UK, the State's intervention in the organisation and regulation of the AFS was the principal factor that facilitated the development of capitalist agriculture in the UK during the 2nd Food Regime (see Gardener 1996; Ilberry and Bowler 1998; Lang and Wiggins 1985; Tarrant 1992). This was done essentially to help provide more secure supplies of cheaper food from within the UK to support development of the domestic agro-food production sector and reduce dependencies on imported foods (see Marsden *et al.* 1993). The core agricultural policies implemented to pursue this approach were the foundations of the second Food Regime in the UK and are briefly described in Figure 2.3 which illustrates how, between 1947 – 2001, agricultural policy facilitated the industrialisation of agriculture and the AFS. This had the effect of widening the potential variety and type of actors that are able to influence the application and accumulation of capital and the organisation and regulation of agro-food supply linkages in the UK AFS. Reform of these policies has gradually reduced the

cost of public agricultural support in the UK to a marginal extent (see Bowers 1985; *Cox et al. 1986*; Smith 1990; Winter 1996) (see Figure 2.4). This is partly due to protectionist agricultural policy being criticised for using public monies to create and develop capitalist agro-food production and supply systems (Commins 1990).

UK and EU agricultural policy alike has impacted upon the nature of agricultural production in the UK in the 2nd Food Regime. Since they acknowledged the negative environmental and social impact of protectivist agro-food production, pre-2001, the Agenda 2000 Common Agricultural Policy (CAP) reforms were considered to be the most radical reforms of agricultural policy at EU level. Indeed, by 2000 agricultural policy was increasingly concerned with being publicly acceptable – attempting to underpin positive relationships between farm level agro-food production, the environment, and society (in the form of food price and availability of variety).

Figure 2.3 Key Features of the Core Agriculture Acts and Policies 1947 - 2001

The 1947 Agriculture Act

- Was designed to provide a secure and guaranteed market for, and supply of, agro-food products by supporting farmers' incomes at minimum prices to meet the cost of living and provide proper remuneration at a time of turbulent market development and expansion post W.W.II.
- Encouraged and facilitated the application of capital and technology to agricultural production and development.
- Supported the establishment of the Agricultural Advisory Service (a source of free advice on farm management, husbandry, and science).

The Agriculture Act 1957

- Reduced public support of farmers' incomes to a level that sustained and encouraged cost efficient capital intensive production.

The Agriculture Act 1958

- Provided 'selective' support to farmers for the production of food commodities where Britain was not self-sufficient and to help the UK AFS become more competitive in global markets. It encouraged increased private sector capital investment in technological innovations for inputs and technology manufacturers.

The Common Agricultural Policy (CAP): Britain joined Common Market in 1973

- The CAP was produced to guide the development of the Common Market's agricultural production and associated markets by increasing agricultural production; ensuring a fair standard of living in agricultural communities; stabilising markets; providing secure food supplies to consumers at reasonable prices.
- The Policy is applied to each Member State of the EU to assist the development of agro-food trade between the EU and the rest of the world.
- The CAP is protectionist, like UK domestic agricultural policy since 1947, and flaws in this approach have led to CAP reform in the late 1970s, 1992. Despite that however, the CAP has remained essentially both protectionist and productivist in its ideology into the 1980s, until the Agenda 2000 reforms.

(Source: Adapted from Ahearn *et al.* 1985; Bowers 1985; Clunies-Ross and Hildyard 1992; Commins 1990; Cox *et al.* 1989; Gardner 1996; Grant 1997; Hill and Ingersent 1982; Hoggart 1992; Marsden *et al.* 1993; Morgan and Murdoch 2000; Whatmore *et al.* 1990; Shucksmith and Winter 1990; Smith 1990; Swann 1992; Ward 1993; Wilson 1977; and, Winter 1996).

Figure 2.4 Key Agricultural Policy Reforms and their Defining Characteristics: 1980s onwards

In ***the mid 1980s milk and beef commodity price support regimes were reformed.*** Milk quotas had the most impact, allowing farmers to accumulate capital and provide a barrier to entry to new farmers without milk quota to trade.
The ***1986 Agriculture Act in the UK*** retained a similar focus to previous domestic agricultural policies but, in response to consumer demands, advocated conservation and enhancement of the natural countryside for wider public benefit.
The ***CAP MacSharry reforms of 1992*** are possibly the highest profile agricultural reforms of recent times. They acknowledged public concern about food safety and EU enlargement before the close of the GATT Uruguay Round and Agreement in 1993[3].The MacSharry reforms did not reduce public spending on agriculture or question the use of subsidies. Rather, they altered the way in which payments were made to farmers and therefore kept food prices high. As a consequence of this, export subsidies have been of concern in the subsequent Agenda 2000 CAP reforms.
Agenda 2000 came about due to persistent pressure for cost effective production of food that is safe, high quality, and differentiated in ways that protect the physical environment. Agenda 2000 reforms have been undertaken in accordance with the '(England) Rural Development Plan (ERDP)'[4]. The ERDP seeks to encourage and secure the robust socio-economic-environmental development of rural areas. It is the first policy to advocate a regionalised, less top down, approach to securing these objectives.

(Source: See Britton 1990; Cox *et al.* 1990; Daugjberg 1999; Grant 1997; Hodge 1990; Hughes 1994; Hughes 1996; Ilberry 1988; Marsden and Wrigley 1996; Ray 1994; Swann 1992; Swinbank 1999; and Winter 1996, 2000.)

State intervention in the UK AFS has not been restricted to the regulation and management of agro-food production and trade though. Indeed, one of the most significant pieces of State intervention that has affected the UK AFS was the repeal of the Retail Price Maintenance (RPM) Act in 1964. Between 1947 and the mid 1960s, specialist and small grocery retailers were the principal food retailers in the UK, selling a standard range of

[3] Which was concerned with the liberalisation of agricultural trade (see Brown 1994; Swinbank 1999; Winter 1996).

food at prices stipulated by the food manufacturers, and influenced by State intervention in agro-food production and marketing (for example, the Milk Marketing Board). In 1964 the RPM Act was repealed, enabling grocery retailers to charge different prices for the food they sold and compete with one another primarily on the basis of the price charged for food.

With increased sales, principal food retailers (the MGRs) gain access to greater amounts of consumer expenditure on food. Once they had gained a high degree of access to consumer expenditure on food through the sale of food at low prices, MGRs began to make specific demands of farmers and food processors. To help them accumulate greater market share, they demanded that farmers and food processors supply them with food of a type, and at a price, demanded by consumers. Furthermore, to reduce their direct overheads and the retail price of food, MGRs established individual, vertically integrated, supply linkages with particular food processors that offered discounts for bulk and mass distribution (see Foord *et al.*1992; Hamm 1982; Hughes 1996; Smith *et al.* 1995). In turn, food processors established such linkages with farmers and other ingredient suppliers, to ensure that they received the necessary ingredients to provide the produce demanded by MGRs, at a price predetermined by the MGRs.

This approach to supply chain management has increased MGRs' competitive advantage over other retailers (see Shaw *et al.* 1989) and has stimulated competition between all grocery retailers and between them and their suppliers. For example, by the late 1970s the supply linkages between retailers and food processors had become more vertically integrated and bespoke, tailored around MGRs' individual demands for the production of their own label foods. This category of food was initially developed as a means to offer

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[4] Each Member State of the EU is responsible for developing their own rural development plan, and separate plans have been developed for England, Wales, Scotland and Northern Ireland through collaborative exercises between key government departments and statutory bodies subsequent to extensive consultation with farmers and a wide range of rural interests nationally and in each region of the country. Each national Plan must have been ratified by the EU Commission, by June 2000, to ensure that it is in line with the European plan for development, but ultimately, each Member State is now expected to be able to assist themselves more than they have previously.

lower priced food to consumers, to gain additional market share from other retailers (see Foord *et al.* 1996). It is now a discrete sector of the UK AFS and, as consumer demand has become more discerning, it has begun to compete with branded produce on the basis of variety and differentiation (see Fernie 1990; Hamm 1982; McDonald *et al.* 1989)[5]. As a consequence, competition has developed between MGRs, other retailers and food processors; within the food processing sector; and, between food processors and their suppliers, including farmers (see Atkins and Bowler 2001). In addition to this, to improve their access to the food retail market in the 1980s and the 1990s MGRs undertook substantial merger and acquisition activity (also see Fernie 1990; Shaw *et al.* 1989). Thus, the UK food retail sector has become more concentrated, with many smaller retailers marginalised from the UK AFS since they are unable to compete with MGRs.

The repeal of the RPM Act in 1964 thus had a complex and extensive impact upon the organisation and regulation of supply linkages upstream from the retailer in the UK AFS. By the late 1970s, at the time when it is generally accepted that Fordism was in crisis, the mass market supply of standardised agro-food products at low prices became less viable. It soon became evident that protectionist agricultural policies were both ineffective and inefficient. Surplus supplies grew, and consumers began to express concern about that, and the variety, price, and quality of food available, as well as the impact of prevailing food production methods on the environment and animal welfare (Marsden *et al.* 1993). Such a crisis may therefore be seen as a reaction to the adverse effects of the Fordist approach to agricultural development. Indeed, the literature refers to these events as the crises that led to the demise of the 2nd Food Regime and the development of a subsequent (3rd) Food Regime. Thus, by the mid 1980s, reform of protectionist agricultural policy was required:

In Europe, and across the advanced capitalist world [including the UK] . . . ***the State lost interest in maintaining the technology/ policy model that had been established in the 1940s, leaving the global food system, and the production practices of the farm sector in particular, exposed to a crisis of legitimacy****. In addition, parallel to these shifts, there*

[5] An example of a major UK food processor being involved in such a relationship with a grocery retailer is United Biscuits whose output in 1993 comprised two thirds of produce bearing their own label brands, and one third bearing grocery retailers' own label brands (Ray 1994).

developed in many countries a ***greater social consciousness over food quality and the environment*** (Ward 1993: 357) [emphasis added].

A number of writers have theorised contemporary agro-food policy reforms (for example, see Atkins and Bowler 2001; Buttel 1999; Friedland 1991; Goodman and Redclift 1991; Grant 1997; Jackson and Thrift 1995; Lahidji 1998; Whatmore *et al.* 1990; Ray 1994; Sutton 1999; Tansey 1994; Vidal 1999; Warde 1997; and, Wilson 1993). The majority of these conclude that since the 1970s, changes in consumer demand have been a major influence upon those reforms (see Cannon 1992; Cook 1994; IGD 1999; Lahidji 1998; Sutton 1999; Wilson 1993). The most influential consumer demands are cited as being:

- An increased demand for chilled, fresh food products with a short shelf life.
- Decreasing life cycles for food products and the growth of new 'own-label' food products designed to meet the rapid changes in consumer demand.
- Incentives for all parties to squeeze costs in the supply chain to gain additional margin and enhanced competitiveness.
- The internationalisation of the agro-food supply chain and year to meet year-round demand for particular foods.
- Persistent and substantial demand for food at the 'right price'.

Vidal (1999) considers how this situation has come about, suggesting that,

> . . . (a)*fter years of accepting the paternalistic line of governments, corporations and shops claiming to offer consumers 'choice' and protection, there is accumulating evidence that* . . . [consumers] *are wising up to how they are being abused – and starting to stand up for their rights* . . . (C)*onsumer power is* . . . *volatile*... (Vidal 1999).

Consumer resistance to the norms associated with production and supply linkages in the UK AFS began to be seen in the late 1960s however, with numerous consumer pressure group based campaigns against animal production methods (Grant 1997) and the impact that agriculture has on the environment (see Smith 1988; Vidal 1999). Smith (1988) argues however that such activity rarely impacted upon politics until the 1980s. In addition, Warde (1997) has suggested that contemporary consumer demand features a 'global – local' dialectic that has encouraged the development of more diverse global and niche

markets and supply linkages (see Atkins and Bowler 2001; Beck 1992; Friedland 1991; Giddens 1991; Piore and Sabel 1984). For example, there is growing demand for internationally sourced and alternative foods such as organic, animal welfare friendly, and locally produced foods (see Atkins and Bowler 2001; Gilg and Battershill 1998, 2000; Street 1990; Tovey 1997). It is no longer necessary for uniform arrangement of production relations for the end market, simply because consumers no longer simply demand standard meal constituents and diets (Lahidji 1998).

A more sustainable form of contemporary AFS supply and production relations is therefore now considered to be more flexible and organised in such a way as to allow rapid and accurate response to consumer demands. It is in view of such change that,

> *...the term flexible specialisation . . . has been coined to signify the potential not only to meet shifting market niches but also to* ***do so through a chain of economic organisation which potentially involves co-operative relations between firms in industrial districts*** *(pooling technology or marketing functions, for example), job enrichment [or, alternatively, intensification] through multiple skilling and task-switching, subcontracting between producers and consumers,* ***new forms of work organisation and 'just-in-time' delivery of inputs to economise on inventories and to conform with the capacity to change product composition and quality***... (Fine 1995: 136) [emphasis added].

The flexible specialisation approach to production and supply organisation and regulation is a fundamental element of most interpretations of post-Fordist approaches to capitalist accumulation (see Fine 1995; Jones 1997) and change in consumer demand (Fernie 1990; Foord *et al.*1992; Hughes 1996; Lavelle 1996; Marsden *et al.* 1991; North 1990; Shaw *et al.* 1989; Smith *et al.* 1995). In the UK AFS since the late 1970s, MGRs have made flexible vertical collaboration the conventional way to procure food that consumers demand. Such an approach provides MGRs with security of supplies, as well as providing suppliers with an assured end market (see Ailawadi *et al.* 1995; see Bowler 1992; Grant 1997; Hill and Ingersent 1982; Howe 1983; Lang and Wiggins 1985; Lavelle 1996; Shaw *et al.* 1989; Zwart and Fearne 1994).

The way that these models of production and supply have, and continue to be, developed within the UK AFS, between farmers and food processors specifically, is a vital issue for

the empirical research in this study. For example, in vertically integrated supply linkages, suppliers are responsible for managing the delivery of supplies to the end customer, which substantially reduces the direct overheads and risks for the end customer (the MGR). MGRs have benefited from vertical integration and placed additional pressures on farmers and food processors to meet their vertical integration demands, in order to remain active in the mainstream UK AFS. In view of this, the impact of MGRs' influence over supply linkages and relations in the UK has therefore been widely criticised[6], and MGRs have been seen as,

> *the 'new masters of the food system' . . .* [with] *key responsibilities in the management and policing of the food system and in the social structuring of consumption...* (Marsden and Wrigley 1996: 33).

It has also been argued that MGRs, as well as consumers, are able to manipulate food demand, and restructure and reorganise established production and supply activities and linkages to meet that demand (see Ray 1994). Such reaction to MGRs' use of vertical collaboration, and potentially unfair or unethical behaviour, has influenced the creation of a voluntary Code of Practice that oversees MGRs' performance in their supply linkages with farmers and food processors[7]. In reality though, under the post-Fordist (consumer demand driven) MSR, and persistent demand for low priced food, it is unlikely that vertical collaboration will cease to exist in the UK AFS in the future (see Hughes 1994; Hart 1992; Marsden *et al.* 1989; Ray 1994; Zwart and Fearne 1994: 55).

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[6] For example, vertically integrated supply chains have been seen as the root cause of disempowerment for farmers wanting to pursue a more traditional approach to farming (Welsh 1997). Furthermore, in 1981 the Monopolies and Mergers Commission found that the power of large retailers has been favourable to consumers' interests (Grant 1997), and in 1999 there was another inquiry into the matter by the Office of Fair Trading in the UK (MAFF 1999). In addition, consumer concern about the price MGRs charge for food engendered an investigation into MGRs' trading behaviour and treatment of suppliers and end customers, revealing, for example, that the pricing structure for meat marketing is not unfair in respect of farmers (MAFF 1999; Veash 1999). In reality, Grant (1987) suggests that such investigations have little value since it is most unlikely that legislation against price discrimination by food retailers will be introduced in the UK since it has been costly and difficult to enforce in other countries.

Demand for local foods from local outlets, for example direct from the farm, has impacted upon AFS policy and market relationships in the very recent past (see Hinrichs 2000; Holloway and Kneafsey 2000; Tregear *et al.* 1998; Warde 1997). Particularly since FMD 2001 in the UK, local food production and supply systems have been of significant concern to agro-food and rural development policy (see Bennett *et al.* 2002; Weatherall *et al.* 2003; Policy Commission 2002). What is more, Atkins and Bowler (2001; also see Ray 2000) argue that it is currently possible to develop and organise local food production and supply or marketing systems alongside globalised supply linkages. The potential existence, viability and mode of organisation and regulation applicable to localised agro-food supply linkages between farmers and food processors (alongside and in competition with the vertically collaborative supply linkages that are primarily orchestrated by MGRs) is a primary concern of this study.

Facilitated by very recent agro-food policy reforms in the UK, contemporary State intervention in the UK AFS may help underpin the development of such an AFS that has both mainstream and alternative supply linkages. The England Rural Development Plan (ERDP) was launched in 2000 and is one of the most crucial AFS policies in this regard. As part of the Agenda 2000 CAP reforms, the ERDP is seen as a landmark policy for the UK since it highlights the importance of the relationship between farming, farmers, the location of the farm, the region or local area, food and the consumer. Nick Brown (UK Minister for Agriculture in 2000) has summarised the integrated, deep and wide, agenda for the ERDP thus:

[It] . . . *underpins* ***Government's New Direction for Agriculture*** *by helping farmers . . . to* ***respond better to consumer requirements and become more competitive, diverse, flexible and environmentally responsible****. It also provides help to rural businesses and communities which need to adapt and develop. The Programme . . . takes a broad view of the needs of rural areas and rural communities . . . offers a more integrated set of schemes . . .* [and] *places much stronger emphasis on* ***addressing regional and local issues and on encouraging and developing ideas at grass roots level****. Its success depends*

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[7] In particular, the voluntary Code of Practice for retailers' relationships with farmers specifically prevents retrospectively negotiated payments being made and does not allow supermarkets to change their demands of their farmer suppliers on an *ad hoc* and short notice basis.

on continuing to work in partnership with all those . . . with an interest in rural areas . . [who **all]** ***have a part to play in helping to develop the Programme*** *and establishing it as a solid foundation for the future* (Brown, October 2000) [emphasis added].

In addition, in 2000, MAFF asserted:

. . . **[Farming must be]** ***forward-looking and sustainable****. It must be* ***competitive****, and* ***flexible*** *enough to* ***respond quickly and effectively to market changes and consumer needs*** . . .[In view of this] ***Government has a duty*** *to ensure that the essential safeguards for the consumer, the taxpayer and the environment are in place. But we must* ***regulate only where it is really necessary*** *and* ***make full use of market and voluntary measures to assist these objectives*** . . . [For example,] *Britain now has the highest and tightest* [food safety] *standards in the world* . . . [and to] *maintain these . . . means* ***effective, rather than onerous, regulation***... (MAFF 2000: 3-6) [emphasis added].

This statement from MAFF is significant in terms of the way in which the State perceives it to be appropriate for it to intervene to ensure food safety is maintained in the UK AFS. Since the mid 1980s, the rising number and frequency of occurrence of food safety scares in the UK have made the safety of the food which is produced and consumed in the UK a matter of general public concern. This suggests a need for State intervention to ensure public health. Increasingly though, as illustrated above, the State is allowing the food industry to regulate itself in terms of food safety and quality. This is a concern of section 2.5.1.1.

2.5.1.1 Food Safety

Food safety is a core concern in the contemporary UK AFS and the literature suggests that the MSR of the 3rd Food Regime acknowledges food safety as an influence upon supply linkage organisation and regulation. As a result of a number of food safety crises in the UK since the mid 1980s. No longer is it crucial simply to produce food, it is now particularly important to produce food that is safe and which is of a certain quality. The UK Government has acknowledged this, and the potential impact that unresolved consumer concerns about food safety may have on the sustainability of the UK AFS. Taking this into account, in 2000, the Labour Government established the Food Standards Agency (FSA), to demonstrate its willingness to protect the consumer.

The creation of the FSA suggests that Government is willing to help provide mechanisms that will assure the public of food safety. However, its lack of direct intervention in the implementation of food safety regulatory practices implies that market relations, mechanisms, and practices are responsible for the provision and availability of safe food in the UK. These are crucial points for this study in terms of the contemporary influences upon how, and why, labour and capital are applied to the UK AFS as they are by farmers and food processors. For example, under such a scenario, farmers are central to the delivery of safe food. It may therefore be helpful if farmers had a more comprehensive understanding of consumer demands and market changes. Farmers' contact with consumers, and ability to understand them, has however been vastly reduced as a result of retailers' direct contact with consumers, and the way that they choose to filter information about consumer demand back upstream to the farmer. Farmers' ability to access and use consumer demand and market change information, as well as the way that such relationships are organised and regulated, is clearly important and there is general public agreement that existing food safety management arrangements and mechanisms in the UK are insufficient, inefficient and inappropriate. Indeed, many consumers are of the opinion that food poisoning could occur at any time, to anyone and anywhere[8] (see Table 2.1 below and Warde 1997; Mintel 1997; Vidal 1999). Perhaps this is an illustration of how consumers have impacted upon Government behaviour. It appears to have, perhaps, stimulated, if not sanctioned, Government's reduced role in food safety regulation in the UK.

[8] Most consumers are extremely aware of the concepts of food safety and quality (see Almås 1999; Dnes 1996; IGD, July 1999; Lacey 1992; Mintel 1997; Shaw 1999) as a result of a series of high profile food safety crises in recent years (see Harrison *et al.* 1997; Hitchcock 1990; Howells *et al.* 1990).

Table 2.1 UK Food Consumer Attitudes towards Managing Food Safety

Particular Attitude/ Opinion	Percentage of Adults in Agreement with Given Statement
Food manufacturers should provide more information on food safety issues	45
There should be more clearer labelling of ingredients, additives or E numbers on packaging	43
Government guidelines on food safety can not be trusted	41
I am generally concerned about the safety of our food these days	41
Storage guidelines on food packaging should be made simpler	26
Retailers should provide information on food safety issues	25
I am concerned about contracting food poisoning when eating out	22
I am concerned about the safety of the food my children eat, both in and outside the home	21
I pay attention to government guidelines on food safety	15
None of these	6

(Source: Mintel 1997).

Such consumer reaction has grown since the mid 1980s and the assent of the Food Safety Act (FSA) 1990 in the UK (see James 1997; Simpson 1992). The Act is one of the most conspicuous pieces of public food safety legislation in recent years (see Harrison *et al.* 1997; Marsden *et al.* 2000; Walley *et al.* 1999), demonstrating a radical restructuring of food safety legislation in the UK. It was the first attempt to regulate food adulteration, consumer protection and public health in the UK (see Hobbs and Kerr 1992). Before this, legislation relating to food production and distribution had been fiscally oriented, with some concerns about the security of supplies, and the accessibility and safety of food.

The FSA 1990 has however been criticised for being too demanding (see Peck *et al.* 2000). To meet the demands of the FSA 1990, each sector of the UK AFS must act with 'due diligence' in relation to food (see Hobbs and Kerr 1992; Simpson 1992; Peck *et al.* 2000).

DEFRA[9], Local and Central Government enforces the Act (North 1994) and if a requirement of the Act is not met, offenders can be imprisoned (Hobbs and Kerr 1992; MAFF, April 1997). In addition, after its assent, a number of additional food safety management systems (for example HACCP[10], TQM[11] and ISO9000[12]) started to be used by MGRs and larger food processors in the 1990s (see Beardsell and Dale 1999; Loken 1995; Marsden *et al.* 1998). In this way, MGRs have been able to exploit the marketing benefits associated with promoting and selling quality and safety assured produce (see Loader and Hobbs 1996; also see Cook *et al.* 1998). This has increased the pressure upon farmers and food processors to meet food safety regulations and requirements. That is to say,

> *The differentiated notions, concepts and regulations surrounding food quality* [have therefore] *become a major organising concept around which retailers . . . influence food supply and consumption . . .* [and] *provide a significant vehicle of communication and authority between retail firms . . . in the wider market and regulatory ensemble...* (Marsden *et al.* 1998: 489 - 495).

There appears therefore to be two 'tiers' of food safety and quality regulation in the UK AFS, with both being motivated by actual and perceived consumer demand. The actual need for such extensive regulation in terms of public safety is however questionable. Indeed, it appears that food processors and retailers seeking ingredient suppliers may develop and use the demands of such food safety management systems and procedures as benchmarks or bargaining resources to make their suppliers act in a certain way (which may be above and beyond statutory requirements). The legitimacy of such actions is highly

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[9] MAFF was renamed the Department of the Environment, Food and Rural Affairs (DEFRA) after the general election and the FMD crisis in 2001. In doing so it also took on new and additional responsibilities since it took over the responsibility for Government management of the environment from the Department of the Environment Transport and the Regions (DETR). What is more, and significantly in terms of its possible future remit, it lost any nominal reference to agriculture in its name, thereby implying that agriculture was of relatively less importance than, even unrelated to, the environment, food and rural development.

[10] Hazard Analysis and Critical Control Point Analysis. HACCP systems relate to each stage of the food production and processing system that identify with and implement the means to prevent hazardous food production (see Loken 1995). The system is administered by local Government Environmental Health Officers (EHOs) who assign a measure of risk to a food company on the basis of what food they use, how profitable their business is, and how much control they are able to exercise over the premises where food is produced (see Harrison *et al.* 1997; Simpson 1992).

[11] Total Quality Management.

questionable and it is a concern of this work in terms of its role and relative power, or ability to influence supply linkage organisation and regulation in the UK AFS during the period of time referred to as the 3rd Food Regime.

In sum, reflecting on the current state of food safety management in the UK AFS, Harrison *et al.* (1997) assert:

> *During the 1990s,* [food law and food quality in the UK food industry has] . . . *been* ***far from stable*** *or predetermined. Indeed, they are* ***very much contested and constantly evolving as a result of reliance upon the relative strengths of the main actors and agencies involved and in reaction to food safety 'scares' and a 'deregulatory' initiative within the UK Government***... (Harrison *et al.* 1997: 474) [emphasis added].

Such food safety legislation and regulation requirements should, in principle, promote and stimulate closer relationships and better understanding between customers and suppliers (see Hobbs and Kerr 1992; Simpson 1992). This has not generally occurred though. For example, because the cause of unsafe food is generally considered to be the methods used to produce food at farm level (Bates 1999), MGRs have imposed a variety of stringent controls over farmer suppliers (see Marsden *et al.* 1998). This has simply increased MGRs' direct intervention into the nature, and cost, of farm level production and supply linkage activity organisation and regulation (Morris 2000), without justly rewarding farmers for their efforts, or providing notably higher quality or safer food for consumers. There is, therefore reason to suggest that MGRs have used the complex nature of food safety management and regulation in the UK as a competitive tool to meet consumer demands and expectations, and accrue greater market share. What is more, the costs of complying with such demands have made access to, and entry of, the UK AFS more difficult for new and SME food companies in particular (Hobbs and Kerr 1992).

The ways in which food safety is managed in the UK do seem inequitable in terms of the way they are used to make demands of different participants in the UK AFS. They also appear to be ineffective since consumers still demonstrate a high level of concern about the

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[12] The British Standards' international mark of quality.

safety of the food that they eat. For example, the UK Food Standards Agency (2002) recently published a report on the future of food and farming in the UK. In it they describe how many people are at least 'vaguely uneasy about food supply in the UK'; are uneasy about the risk of infection or food poisoning; and, have suspicions that food regulations are not adequately policed or enforced. A more systematic and equitable approach to managing food safety and quality in agro-food supply chains, to allay public concerns, would therefore appear to be required (see Almäs 1999; Walley *et al.* 1999).

The Institute of Food Science and Technology (IFST) is a professional representative body for food scientists and technologists, and is independent of government, industry and any lobbying or special interest group. In 1999, the IFST asserted that such an approach would only be possible through a demonstrable improvement in food safety, and the safety of food. The UK Food Standards Agency was established on April 1st 2000 to help achieve this[13]. Whether this will be possible, and / or publicly beneficial, in the long term in the highly competitive, and mostly privately regulated, UK AFS has yet to be demonstrated. The production of safe food for human consumption is however more closely regulated by the private[14] sector than any other industry (see North 1994). MGRs are now the most significant influence upon the nature and form of food safety and quality management in the UK AFS (see Flynn *et al.* 1994; Marsden and Wrigley 1996; Marsden *et al.* 2000). As a result, Marsden *et al.* (1998) argue that the responsibilities of the State have largely been substituted for more microcorporatist corporate, and State relationships and procedures that have been designed and implemented primarily by MGRs. Such modes of food safety regulation, driven primarily by MGRs, have impacted upon the nature, form, organisation and management of supply linkages in the UK (and global) AFS (see Bates 1999; Pickernell and Hermyt 1999). The extent to which food safety demands affect farmers' and

[13] In January 1998, the Government White Paper, 'The Food Standards Agency: A Force for Change' stated that the Agency would work at arm's length from Ministers to streamline food safety regulation in the UK and communicate with consumers (see James 1997). All work undertaken by the Agency would be funded by industry levies and would contribute to the development of future European food policy (James 1997).

food processors' activities, and who makes those demands, are therefore areas worthy of investigation. Thus, they are addressed by this study, which seeks to arrive at a deeper understanding of whether the concept of Food Regimes captures real experiences of supply linkage organisation and regulation. In an attempt to understand the contemporary UK AFS, it is of particular importance for this study to understand to what extent and how food safety affects the farmers' and food processors' organisation and regulation of supply linkages in the UK AFS (see Chapters 4 – 7 below).

2.5.2 Farmers' and Food Processors' Experiences in the UK AFS between 1947 - 2001

This section considers how the organisation and regulation of farmers' and food processors' supply linkages was affected by the way in which labour, capital, and State relations were organised in the UK AFS between 1947 – 2001 (as described in section 2.5.1). Specifically, It explains how such influences have affected the way in which food processors go about procuring ingredients, how and why they process them, and how they market and distribute their end products. It also illustrates how these influences have changed the way in which farmers go about producing food for supply to food processors and retailers, as well as how they supply it to those sectors of the UK AFS.

As discussed above, vertical integration was a dominant organisational and regulatory feature of supply linkages in the 2nd Food Regime. The vertical integration of supply linkages in the UK AFS has fundamentally changed the way in which information about agro-food demand is conveyed within and throughout the AFS (see Moran *et al.* 1993). Indeed, vertical integration appears to have stimulated,

> *...an imbalance in power relations which tends to favour the retailers and which appears to be associated with the execution of retailer power and innovation within supply relationships...* (Hughes 1996: 90).

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[14] Indeed, food consumers no longer trust the UK government's statements that food is safe to consume (see Mintel 1997; Vidal 1999) and the UK MGRs have been actively involved in the development of schemes to regain and build consumer confidence in their produce (see Marsden *et al.* 2000; Simpson 1992), especially red meats (see Hobbs 1996). Marsden *et al.* (1998) refer to this as the construction of quality hierarchies by different grocery retailers in the UK.

These pressures have affected food processors since the repeal of the RPM Act in 1964, but Grant (1987) explains:

... [during the 1950s and early 1960s, food processors] *were the source of almost all product innovations and new-product developments, they controlled physical distribution to wholesalers and retailers, they were responsible for virtually all product advertising, they exerted a powerful influence on retailers' stocking and display of their products, and they controlled retailers' margins by setting retail selling prices* ... (Grant 1997: 43).

Vertically integrated alliances should, in principle, benefit each party, enabling them to harness one another's power in the marketplace (Foord *et al.* 1996; Smith *et al.* 1995). In the case of the UK AFS though, retailers have pursued such relationships in an aggressive manner to 'squeeze out' food processors' brands from shelves in their stores (Marsden and Wrigley 1996), in so doing they have manipulated food processors' revenues (McDonald *et al.* 1989). For example, MGRs have made food processors responsible for the procurement of ingredients to meet their ultimate demands (see Hamm 1982). Since the procurement of ingredients is the largest cost for most food processor businesses (see Connor *et al.* 1985), this has increased food processors' direct overheads. Such impact is however less significant in consideration of the fact that this approach to relationships with their end customers can reduce the risk of food processing business failure (Hughes 1994; Zwart and Fearne 1994). A number of writers (for example, see Commins 1990; Foord *et al.* 1996; Lang and Wiggins 1985; Welsh 1997) have reported that this led a number of larger food processors to develop and manage supply linkages with smaller food processors and farmers (their suppliers). This enabled the larger food processors to pass a proportion of their costs back upstream and enjoy the benefits of vertical integration (such as reliability of demand) with their end customers. Their suppliers, however, received relatively few, if any, of these benefits and vertically integrated supply linkages have thus tended to be interpreted as a means of exploitative management of farmers by food processors and MGRs (see Welsh 1997). Commins (1990) explains that,

...contracts between farmers and processors are [essentially] *contracts between unequal partners unless there is vigorous competition among the firms wishing to enter contracts.*

The more usual case, though, is one in which processors are in a monopsony or near-monopsony position (Commins 1990: 56).

Ultimately, these types of supply linkages marginalised many smaller independent food processors (with higher overheads and smaller scale production lines) and farmers (producing commodity agro-food products that could not be sold directly to MGRs and consumers) from the mainstream commercial UK AFS (see Shaw *et al.* 1989). As a result, numerous smaller food processors were formally (bought out) or informally (used as sub-contracted suppliers) subsumed within larger food processor organisations in the 1970s and 1980s, as larger food processors sought to extend their capacity to supply to MGRs, and, thereby, to increase their own market share.

Rather than adopting the industrialised vertical integration approach to supply linkage organisation and regulation, some food processors have, however, established more spatially concentrated (within regions) supply linkages to help them:

- respond more rapidly and accurately to customer demand and reduce the cost of procuring raw ingredients and supply chain linkage management (see Goodwin 1994); and,
- reduce the risk of food quality or safety impairment, and reduce the cost of distribution (see Lavelle 1996; Welsh 1997).

One particular well renowned example of this is the relationship between major vegetable processing companies such as Birdseye and vegetable producers in East Anglia. For example, Birdseye promises to be able to deliver high quality peas to the consumer because the peas are packed within two and a half hours of being picked. These supply linkages have become more popular within the UK AFS as a result of post-Fordist consumer demand characteristics, in what has been seen as a 3rd (post-Fordist) Food Regime.

Simultaneously, however, other larger food processors undertook substantial merger and acquisition activity[15] to reduce their overheads, dispose of loss making activities (Hall and Sweeney 1986; Howe 1983; Welsh 1997), and enter new markets that have developed under post-Fordism. This has led to further food processing sector concentration, creating barriers to entry for smaller food processors wishing to enter the mainstream commercial UK AFS. The activities and experiences of SME food processors, and the power relations that exist between them and the rest of the UK AFS during the 3rd Food Regime and 2nd Food Regime, are not well documented in the literature. This review recognises this, and the issue is of fundamental concern to the empirical research in this study (see Chapters 3 - 8).

The impact of intensive capital application and accumulation upon farmers between 1947 – 2001 are also of concern to this study. As described in 2.5.1, post W.W.II agricultural policies have largely stimulated capital intensive farm level agro-food production. In 1958, Cochrane conceptualised this process as an 'agricultural treadmill' (see Ward 1993). According to Cochrane, as technology is applied by more producers to increase agro-food production efficiency, the price of a commodity falls and this motivates other farmers to follow suit (also see Edwards 1992; Goodman and Redclift 1989; Goodman *et al.* 1987). Commercial farming has thus become an industrialised sector of the economy and an integral element of the industrialised UK AFS (see Commins 1990; Goodman and Redclift 1989; Goodman *et al.* 1987; Marsden 1990; North 1990; Troughton 1986; Ward 1993; Whatmore *et al.* 1987). Figure 2.5 summarises the three industrial processes that have been central to the development and maintenance of the agricultural treadmill: it describes the operational concepts that characterise the Fordist MSR in relation to agricultural production in the UK. These processes have taken place as a result of capital accumulation and appropriation at farm level (see Figure 2.6).

[15] Between 1985 and 1992 there were 2,140 mergers and acquisitions recorded in the EU food and drink sector (Ray 1994).

2.5.2.1 Industrialisation of the UK AFS

The accumulation and appropriation of capital at farm level has led to farming being subsumed by the industrialised AFS. The theory of capital subsumption conceptualises how and why farmers become more or less dependent on capital for reproduction of their farm enterprise (see Fonte *et al.* 1994; van der Ploeg 1986; Whatmore *et al.* 1987). Capital subsumption of farming and the AFS can be direct or indirect. Direct capital subsumption involves the direct ownership and control of the means of production on the farm, the transformation of labour relations, and a strong influence over the development of the technical means of production by corporate capitals external to farming and the AFS. Indirect subsumption is the appropriation of surplus value from the farm production without transformation of the labour process or controlling the technical means of production (Whatmore *et al.* 1987).

Figure 2.5 Three Fundamental Processes in the Industrialisation of Agriculture

Concentration

- Mainstream commercial agro-food production has increased on large farms located close to food processing and distribution plants in particular geographical areas (Bowler 1986; Marsden *et al.* 1989; Troughton 1986). By the late 1990s the UK had more, larger farms than anywhere else in the EU (see Grant 1997), with most in central geographical locations. In contrast, smaller farmers, particularly in more remote locations such as upland Northern, and South West Britain, have struggled to access and use the same type and quantity of resources as larger farms (Bowler *et al.* 1996; Commins 1990[16]; Edmond and Crabtree 1994; Edmond *et al.* 1993; Edwards 1992; Gasson 1988; Halliday 1989; Marsden 1990; and, Marsden *et al.* 1986).

Intensification

- Is the means by which capital, technology, and machinery have been applied to (initially indoor) production systems to create an optimum production environment to with low cost, high volume output (see Britton 1990; Symes and Marsden 1985)[17].
- Is highly dependent on the availability of, and access to, capital and other resources.
- Has encouraged concentration of certain types of production in some locations (see Edwards 1992).
- Has stimulated high levels of consumer concern about animal welfare in intensive production systems ('factory farms') (see Symes and Marsden 1985).

Specialisation

- Is the increased production of certain products over others, by one farm, or in a certain location, encouraging diversification from production regimes typically related to a region (Bowler 1986; Edwards 1992).
- Is the outcome of intensive use of capital and other resources for the production of one commodity over others to create a low cost per unit of output thereby providing economies of scale (see Bawcutt 1997).
- Is made viable and attractive through production subsidies[18] and mechanical and biotechnological developments[19]. It is closely and inherently related to concentration (see Bowers 1985; Bowler 1992; Bowler 1996; Ilberry 1998; Ilberry and Bowler 1998; Munton 1992; Newby 1985; North 1990; Winsberg 1980).

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[16] For example, since Britain joined the EC in 1973 the South- and North-West of the UK have become renowned for small scale farms (Marsden and Symes 1984) that mostly produce milk (*Cox et al. 1986*; Newby 1985), the northern uplands and highlands of Scotland for pastoral (Newby 1985) extensive livestock farms, and the South-East for large scale (Marsden and Symes 1984) arable (Newby 1985; Ward 1997) and horticultural crop production.

[17] For example, during the late 1950s smaller, upland farmers were encouraged to take a more (capital) intensive approach to farming to improve their productivity. In reality however, larger hill farms benefited from grants and subsidies while smaller farms were ultimately marginalised from the commercial AFS in the UK since they could not achieve the same scale economies as larger farmers (Marsden *et al.* 1993).

Figure 2.6 Capital Appropriation and Substitution

Capital Appropriation:

- Involves the application of capital to commodity production to establish and continue linkages between farmers and their end customers in the market place.
- Involves the discontinuous but persistent transformation of elements of the agricultural production process into industrial activities that are used to produce agro-food products.

Capital Substitution:

- Occurs when raw materials that were once procured from farms and farm produce are ***substituted*** for manufactured products with similar characteristics.
- Can reduce production and processing costs and has largely taken place at the food processing level, at least until the increased development and application of GMOs at farm level.

(Source: Adapted from Bowler 1992; Goodman and Redclift 1991; Goodman *et al.* 1987; Ilberry and Bowler 1998; LeHeron 1988; Munton 1992; Van der Ploeg 1986; Whatmore 1994)

Munton (1992) asserts that the extent to which farmers have become more or less directly and / or indirectly subsumed by capital differs according to each farmer's ability to secure finances, and their style of business development and management. For example, for some farmers the sale of land has been an inevitable outcome of industrialisation of the AFS (see Gasson *et al.* 1988; Marsden and Symes 1984; and, Marsden *et al.* 1991). This has resulted in an uneven pattern of land ownership and control (Barrington and Ilberry 1987; Britton 1990; Commins 1990; Marsden *et al.* 1991; Newby 1985; Ray 1994; Shaw *et al.* 1989; and, Troughton 1986). In contrast, some, mostly smaller, farms have remained viable, through the intensive use of family labour to create agro-food commodities that can be sold to raise capital to be invested in the farm business. Enterprises like these have been called

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[18] Subsidised prices were given for cattle, sheep, milk, eggs, barley, wheat, oats, rye, potatoes, sugar beet and wool production and seasonal tariffs and other trade measures were applied to horticultural produce in an attempt to stabilise domestic supply and demand of these products (Bowers 1985).

[19] For example, following biotechnological manipulation, maize was introduced to the UK in the 1970s (Edwards 1992; Tarrant 1975).

'petty commodity producers' (PCPs), whose means of production, and the provision of labour, is combined within the family farm (see Moran *et al.* 1993). Their existence is dependent on two processes: reproduction and transformation.

> ...***Reproduction*** *occurs when the act of production not only results in a product . . . but also recreates the original structure of social relations so that the act of production can be repeated in the same form. Reproduction is both social and technical. Reproduction requires in all cases the creation and distribution of the social product in such a way that . . . the direct producers . . .* [can] *participate in a new round of production and . . . other means of production are maintained or replaced for the new round of production . . . If any technical or social bases of a particular form of production is endangered, either production ceases or its form changes. In either case, reproduction of that form of production is undermined, and the form decomposes. If a new form of production replaces the one which has been undermined, then* ***transformation*** *occurs. The new form, of course, has its own technical and social bases of production . . . reproduction and transformation focus on the dynamic aspects of productive organisation* (Friedmann 1982: 555) [emphasis added].

Other smaller, and less successful, farms have pursued a pluriactive approach to farming. Pluriactivity is when conventional agro-food production occurs alongside other income generating activities on the farm (see Almås 1994; Britton 1990; Friedmann 1982; Fuller 1990; Gasson and Errington 1993; Gasson *et al.* 1988; Hedley 1985; Marsden 1990; Marsden and Symes 1984; Marsden *et al.* 1989; van der Ploeg 1986). The farm crisis of the early – mid 1980s (see Goodman and Redclift 1989, 1990) raised the profile of the concept of farm pluriactivity, and policy makers now accept it as a viable alternative to conventional farming[20]. This is evident for example in the ERDP, as discussed above, which explicitly seeks to diversify rural economies to make them more robust, sustainable and relevant to the spaces and people they relate to or serve. Moreover it is an issue of primary concern to the future of farming in the UK post FMD 2001.

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[20] For example, see Ahearn *et al.* 1985; Bateman and Ray 1994; Byrne and Ravenscroft 1990; Edmond *et al.* 1993; Edmond and Crabtree 1994; Fuller 1990; Gasson 1984; and, Shucksmith and Winter 1990.

Despite policy support, the ability to pursue an alternative income earning activity whilst farming is largely dependent on the location and type of the farm[21]. Indeed, in the UK it has tended to take two forms: the provision of Bed and Breakfast accommodation (see Byrne and Ravenscroft 1990; Edmond *et al.* 1993; Marsden 1990); and / or on farm food processing and marketing (see Russel *et al.* 1991). Such activity reflects a market orientation and response to consumer demand since, under post-Fordism, the general public has begun to demand more healthy, fresh and less processed foods and to use rural areas more for leisure and recreation (see Marsden *et al.* 1993).

Considering this in terms of the debate about the characteristics and existence of a 3rd Food Regime, it is arguable that some agricultural policy objectives are now rather post-Fordist in character (see Bowler *et al.* 1996; Ilberry and Bowler 1998; Shucksmith 1994). For example, the Rural White Paper 2000 (DEFRA 2000) clearly asserts the need for farm diversification and for farmers to be pluriactive, as opposed to dependent on agro-food production alone. Thus, the continuity of farming and rural communities in peripheral or marginal locations is increasingly interdependent, perhaps now more than ever before in the UK. Marsden concurs:

Rather than seeing diversity as something to be explained away by reference to unilinear processes, it is necessary to incorporate it as part of the overall dynamic of capital accumulation ... (Marsden 1990: 376).

Reis *et al.* (1990) caution however that,

... a pluriactivity policy, unless it is well considered, may miss one of the main objectives: creating conditions whereby indigenous farmers and their sons and daughters can afford to remain living (and working) on the holding . . . (P)*olicy must encourage greater levels of pluriactivity if the . . . regional economy is to be able to fulfil its economic, social and cultural roles.* ***However, the spatial and structural variety of circumstances in . . .*** **[a]**

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[21] For example, on upland livestock farms in particular there are few opportunities to add value to their produce, so on farm processing rarely takes place. Therefore on farm tourist accommodation, has been developed more in these locations. In addition, following the imposition of milk quotas, dairy farms appear to be better suited to amalgamation rather than diversification (see Davis *et al.* 1997; Halliday 1989).

region indicate the necessity for great local diversity in the measures adopted (Bateman and Ray 1994: 13) [emphasis added].

Farm diversification thus seems an unlikely panacea for all pressures upon, and threats to, the continuity of conventional farming, either now, or in the future. For example, BSE and other food safety scares, the Foot and Mouth Disease epidemic in the UK in 2001, and the development of biotechnology that reduces the need for extensive land based food production all impact on conventional farming now, and are likely to continue to do so in the future, albeit unevenly, affecting different types of farming and locations more than others[22]. What is more, Immig (2001) argues that the opportunities to meet growing demand for organic food post FMD 2001 are likely to be unevenly distributed in the UK. This is due to the opportunities and constraints that the biophysical environment of a location can impose on more natural (as opposed to technologically improved or assisted) production methods and practices. Such scenarios therefore support the need for localised approaches to agro-food system re-organisation and regulation.

To summarise and close this section of the Chapter, development of the agro-food system through direct and indirect capital subsumption has not been an entirely positive experience for all participants in the UK AFS. This has led to an alternative approach to AFS development being sought. Locally responsive and appropriate endogenous development[23] activities and approaches are now being explored and supported (see the Rural White Paper 2000[24]). Section 2.6 provides a very brief summary of the current demands upon, and required actions for, the restructuring of the UK AFS in terms of the supply linkages between farmers and food processors. Subsequently, it critically analyses the regional supply linkage model as a way of meeting contemporary market demand and

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[22] Quite positively though, findings from preliminary research to assess the impact of FMD on the livestock sector in northern England suggests that it is unlikely that farmers will quit the sector as a result (see Lowe *et al.* 2001). Therefore the majority of smaller marginal farms are likely to continue to exist.

[23] Ray (2000: 1) defines endogenous approaches to development as giving special attention to the territory as the unit of socio-economic development; emphasising the use of collective resources; reorganising local actors into collaborative activities; and, redefining the relationship between the territory and the outside world.

[24] "Our countryside: the Future. A Fair Deal for Rural England", see http://www.defra.gov.uk

stimulating economic development. Finally, it considers how the regionalised supply model has been used to organise and regulate supply linkages between farmers and food processors outside the UK, and how it is being supported as a way to bring about more evenly distributed opportunities to participate in the UK AFS.

2.6 The Organisation and Regulation of Regional Supply Linkages and Networks

As described in section 2.5 above, the industrialisation of the UK AFS between 1947 – 2001 has been uneven, with smaller and more geographically peripheral farmers and food processors being marginalised from the mainstream commercial AFS in the UK. Following the crisis of Fordism, regional or local production and supply network models developed around flexible relations in other sectors of the economy elsewhere in the world. This study is concerned with whether (and how) such model would be viable between farmers and food processors in the UK at the present time. In view of that, the following section of this Chapter critically analyses that model, its origins, and potential value to, and viability in, the UK AFS.

2.6.1 Alternative Models of Industrial Supply Linkage and Economic Development

As discussed in section 2.4 above, the crisis of Fordism and the experience of post-Fordism have revealed that,

> . . . *there are multiple paths towards economic development, and spatial differences persist and are relevant even after initial development for maintaining competitiveness* . . . [and] *recent literature from industrial economists has given interesting insights on the existence and competitiveness of alternative productive systems* ... (Saraceno 1994:325-326) [emphasis added].

Much of the economic geography literature that discusses such alternative production systems refers to them as 'networks' of synergistic, formal and informal, co-operative, production and supply relationships between geographically proximate enterprises (see Grandori and Soda 1995; Zeitlin 1989). This model is built, and depends, upon a distinctly different MSR to the vertical integration model that was, for example, dominant under Fordism and which is said to lead to collaborative and competitive relationships in the

network[25]. Indeed, Fine (1995) suggests that these are required with the flexible specialisation approach to industrial supply linkage organisation and regulation.

The impact of alternative modes of industrial organisation and regulation upon those participating in them is quite different to the impact that the vertical integration model has upon those involved. Alternative models of production and supply organisation and regulation are not a new phenomenon (Piore and Sabel 1984; Sunley 1992; Storper 1995). But, because they are more flexible than Fordist approaches, they have been widely adopted following the crisis of Fordism (see Conti 1993; Fine 1995; Lavelle 1996). For example, 'Just in Time' systems have been used to meet consumer demand quickly, effectively, and efficiently in the car and computer industries (see Allinson 2004; Axelsson and Easton 1992; Bonnaccorsi and Lipparinni 1994; Patchell 1993; Scott 1988). In theory, such flexible and consumer demand responsive relationships are antecedent to the development of an *in situ* industrial identity or 'milieu' (see Asheim 1994). This identity or 'milieu' is then maintained through continued interaction in the supply network to enable the firms that comprise it to continue to respond to consumer demand effectively and efficiently (see Amin 1994; Camagni 1995:198; Bonnaccorsi and Lipparini 1994 Storper 1995:203).

These claims have led to the implementation of regional or local production and supply network model in a number of manufacturing sectors around the world, in order to foster economic development (see Cooke and Morgan 1992; Gertler 1992; Saraceno 1994; Storper 1995). Such models of economic development have however not been implemented in accordance with fixed rules about what defines a (sub-national) region, or local area[26]. They have developed between enterprises in locations where there appears to be an almost 'naturally occurring', as opposed to artificially stimulated, support for this

[25] There is an extensive literature on this subject. But, for example, see Asheim 1994; Axelsson and Easton 1992; Brusco 1982; Camagni 1995; Cooke and Morgan 1992; Gertler 1992; Léborgne and Lipietz 1991; LeHeron and Roche 1995; Storper 1995.

approach to organising and regulating product and supply relationships and activities. Indeed, it would seem that the vision comes from within the economic sector in question as opposed to a body or agency that is responsible for regulating the development of a defined geographical region. In view of this, Storper reasons that:

> ... (t)*he general, and necessary, role of the region is as the locus of what economists are beginning to call 'untraded interdependencies' between actors; these untraded interdependencies generate region-specific material and non-material assets in production . . .* **.[Therefore,]** ***the region . . .is important as an underpinning for these interdependencies, which allow actors to generate technological and organisational change; hence, the region is a key source of becoming – of development – in capitalism*** (Storper 1995:192) [emphasis added].

Section 2.6.2 briefly describes how models of local economic development are organised and regulated in the AFS and other industries across the globe from an RT perspective. Particular attention is paid to the actor networks that comprise, organise and regulate them. In so doing the potential benefits from adopting such an approach to supply linkage organisation and regulation are hypothesised in relation to the case of the UK AFS.

2.6.2 The Organisation and Regulation of Models of Regional Economic Development

A number of authors have noted that regionalised economic development can, at times, be based upon both vertical and horizontal exchange networks (see Brusco 1982; Dicken 1994; Grabher 1993; Grandori and Soda 1995; Ock Park 1996; and Tödtling 1994). According to the literature, such structures stimulate learning and technological transformation between actors in a network (Bye and Fonte 1994; see van Dijk, in van der Ploeg and Long (eds.) 1994) and appear to have ready access to the new resources and services that can assist their development in a certain time and place (Conti 1993). Thus, they attain high levels of combined productivity (Håkansson and Johanson 1993; Léborgne

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[26] That said, for practicality and transferability of meaning, this study defines a 50 mile radius around a defined location to mean local. This was decided with reference to the operational procedures of food processors and haulage companies that use a 50 mile radius as a benchmark for local links, with links extending beyond a 50 mile radius considered less cost effective for them to use.

and Lipietz 1991) and the participants in such a network become dependent or embedded in relations therein (see Conti 1993; Grabher 1993:5; Håkansson and Johanson 1993).

Such an approach to economic development cannot however guarantee economic success. These 'network' relationships may exclude other actors or services that are fundamental modes of support in the capitalist economy. Therefore, such networks should procure and use what have been referred to as 'real services' (managerial and technical expertise provided by third party actors outside of the network[27], see Brusco 1992). Some writers have cautioned, however, that such services be used with caution, to improve long term internal innovation diffusion and reduce myopia in a network, but not replace or compete with services already available from within a network (see Amin 1994; and, Brusco 1992). A collective of network representatives can help with this and the development of an industrial milieu or homogeneous culture of rules and trust that regulates activity in the network for the benefit of the network as a whole (see Kozul-Wright 1994:156; Léborgne and Lipietz 1991:40; Storper 1995). Indeed, in networks,

> ... *activity structures . . . are. . .* ***constructed*** **[and governed]** ***by the actors***... (Håkansson and Johanson 1993:37) [emphasis added].

Such a homogenous industrial culture may be difficult to attain in reality, particularly in a concentrated, highly competitive, global AFS (see Cooke and Morgan 1992; Grabher 1993; and, Grandori and Soda 1995). To that end, Figure 2.7 illustrates how the nature of relationships within network structures can vary. More specifically in relation to this study, the way that the MSR and therefore the regime of accumulation, underpins the development of such a supply linkage model is of concern. That is to say, in networks, firms enter into exchange with one another for different reasons and to differing extents. This is also the case under Fordism, but, in flexible production and supply networks, the

[27] For example, Government and financial institutions as well as collaboration with other enterprises in the network (see Cooke and Morgan 1992; Lundvall 1993).

relationships between participating actors are the sole bases upon which economic systems are developed (Patchell 1993).

Grabher (1993:8-12) has written at length about the nature of relationships in networks' structures, characterising them as being developed upon three different bases:

- Reciprocity – comprising implicit and explicit relations that are contingent upon rewarding reactions from others. Over time, equilibrium is reached in terms of the contributions and returns involved.

- Interdependence – stable networks lead to interdependent relations between actors participating in the network. Mutual orientation is necessary to enable problems to be resolved within the network and to provide the framework for subsequent interactions in the network. In such relations opportunistic behaviour is limited.

- Loose coupling – exchanges are non-specific and occur between relatively autonomous actors in a network in a more or less stable framework that enables interaction and communication and provides access to various sources of information and a broader learning interface than that available under vertical integration.

Since they seek to develop production and / or supply linkages and activities through, "*an ongoing process of exchange between users and producers of qualitative information*" (Lundvall 1993:55), networks appear to be a type of organised market. Precisely how such a 'market' comes to be organised is however not widely explained in the literature. More specifically, the creation and organisation of such a network in the UK AFS has yet to be explored. Given its success in other sectors of the economy elsewhere in the world, its potential applicability for the UK AFS is of interest. To that end, this research has determined whether, how and why a sample of farmers and food processors in North Cumbria would be willing to, or already do, participate in a regional supply network (see Chapters 4 – 7).

The existence and use of power in such networks is of particular interest to this study, which is concerned with supply linkages and power relations in the UK AFS. Power can take one of three forms (see Marsden 1983):

- as control over valuable resources via possession of those resources;

- as influence over the use of resources; and,

- as control over the use of valuable resources via possession and constraint.

Power is thus both a means to exploit interdependencies between related actors (participants in a network) and to stimulate further interaction between them (see Dowding 1996; Håkansson and Johanson 1993). It underpins relationships and networks. Reflecting on this, and the organisation and regulation of supply linkages in the UK AFS between 1947 and the present day specifically, it would appear that the Government and MGRs have attained the first two types of power through protected marketing and vertically integrated supply linkages respectively. The third type of power may however be evident between farmers, food processors, and their end markets in, for example, a regional supply network as characterised above.

Power within a network, particularly a regionalised agro-food supply network is not solely embedded in social and economic resources, assets, and relations though. Biophysical factors will impact upon the potential viability of, and support for, regional production and supply networks in the AFS. Despite substantial biotechnological advances in agro-food commodity production in the last half century, it is not possible to produce each and every commodity, in each and every location in the world. In contrast though, such factors are relatively easy to overcome, or even unimportant in secondary industries, for example pharmaceuticals and car manufacturing, which have become renowned for developing around such production and supply networks in the last two decades.

The regional supply model has however been successfully adopted in a number of manufacturing sectors in recent years, in high technology manufacturing firms in 'Baden Württemburg' and more low technology craft based industries in the 'Third Italy' (see Amin 1994; Arfinni 1999; Cooke and Morgan 1992; Brusco 1982; Fanfanni 1994; Storper 1995). Their potential existence and viability of such a model of production and supply linkage organisation and use in the UK AFS has however not been extensively researched. Section 2.6.3 very briefly describes how and why such networks exist in the AFS in some forms and in some locations. It therefore informs the empirical research questions and analysis in Chapters 3 – 7.

2.6.3 Regional Agro-Food Supply Networks

According to a number of commentators, networks of agro-food supply linkages are historically embedded, traditional features of the economy in the Third Italy (see Arfinni 1999; Fanfanni 1994; Gonnano 1997). They have helped small scale and SME enterprises grow when larger food companies have suffered reduced turnover (see Brusco 1982). Similar production and supply systems exist in the Netherlands too. For example, high value and locally developed, organised and regulated collaborative vertical linkages between growers, distributors and processors co-exist alongside more conventional supply structures (see Folkerts and Koehurst 1998). Furthermore, in Australia, following the deregulation of agro-food production and marketing, the dairy sector has become dominated by local co-operatives that work together to raise and develop the profile of, and marketing opportunities for the sector as a whole (see Pritchard 1998).

In contrast, collaborative and co-operative approaches to marketing are most unconventional in the UK following the deregulation of the Potato Marketing Board and the Milk Marketing Board. It has been reported that some British tomato growers have, however, grouped together in supply networks serving UK MGRs (see Shaw 1994). In these networks the largest grower usually acts as the storage point for produce as well as the information collection / conveyance point between farmers and retailers. Thus, there appears to be at least one possible way to organise and motivate some primary producers into more commercial collaborative activity. There is however need for further investigation of what other models could be developed, or emerge, and what other types of farmers / growers may feel about such an approach to supply linkage organisation and management with their end customers. Section 2.7 below describes the research hypotheses that have been developed from the above literature review and which underpin this study.

2.7 Summary and Synthesis of Conceptual Framework

This chapter has reviewed the key ideas underpinning the conceptual framework for this study. It summarised and critically analysed literature in relation to RT; regimes of accumulation under advanced capitalism, and the impact of those regimes; and, the region as the basis for contemporary economic development and industrial organisation. The

concept of Food regimes has been reviewed in terms of the reported MSRs of the 2nd and 3rd Food Regimes and their impact on the organisation and regulation of supply linkages in the UK AFS, at farmer and food processor levels in particular.

Prior to a description of the study's hypotheses and aims, Figure 2.7 illustrates how industrial supply linkages were organised and regulated under Fordism and following the crisis of Fordism and the impact of that on the geography of economic development. Figure 2.8 summarises how and why it is considered that supply linkages in the UK AFS were organised and regulated as they were between 1947 – 2001, during the 2nd and 3rd Food regimes. It thus provides a framework for critical evaluation of whether and how a 3rd Food Regime is in existence in terms of the case study findings. Following this, 2.7.1 lists, and briefly explains, the study's six hypotheses.

Figure 2.7 The Geographies of Industrial Organisation and Regulation Development under Fordism and post-Fordism

Under Fordism...	**Under Post-Fordism...**
• Industry is generally characterised by an oligopoly of large manufacturing enterprises involved in highly integrated vertical supply linkages with upstream suppliers. Intensive merger and acquisition activity was commonplace for larger MNCs.	• Industry is generally characterised by a large number of flexible and closely knit, horizontal and vertically co-ordinated enterprises involved in a variety of different, vertically disintegrated, production and supply relations / networks using subcontracted labour and resources where appropriate.
• Those responsible for producing the finished product directly influenced / prescribed the type and nature of their upstream suppliers' activities.	• Production and supply relations are generally decentralised and confined to individual regions.
• There is use of dedicated machinery and large inventories by masses of labour in huge factories producing large batches of standardised products for mass consumption.	• There is dependence on and development of 2 way information exchanges throughout the entire production and supply system to ensure market responsiveness.
• There is mass production of standardised products for mass markets complemented by hierarchical separation of scientific management from blue-collar workers.	• The overall objective of supply and production relations is to respond to market demand in a cost effective manner. A popular way of achieving this is through the use of flexible and just-in-time practices to reduce inventory and maximise efficient production for the end market.

(See: Bryson and Henry 2001; Cooke 1996; Holly 1996; and, MacLeod 2001a, 2001b)

Figure 2.8 Supply Linkage Organisation and Regulation in the UK AFS 1940s – 2000s

Timescale	1940s	1950s	1960s	1970s	1980s	1990s	2000s
Food Regime	**2nd Food Regime**				**3rd Food Regime**		
MSR Characteristics	• Transnational restructuring of agriculture to supply mass market • Decolonisation • Consumerism • Growth of forward and backward linkages from agriculture				• Global restructuring, with financial circuits linking production and consumption • Globalisation of production and consumption • Disintegration of national agro-food capital and State regulation • Green consumers		
Key Features of National Government Policy	• Cheap food policies • Credit expansion • Production control mechanisms • Market creation via concessionary export sales and food aid				• Opposing trends of continued protection and deregulation of the agricultural sector		
Core Power Relations	• State driven and funded industrialisation and concentration of production • Mass markets encourage the development of concentrated supply linkages				• Highly articulate and differentiated consumer demand, as well as persistent demand for affordable food encourages the development of niche products and distribution channels • Lack of State support for agro-food production • MGRs stimulate production and supply relations and supply linkages for the mainstream and mass markets		

(Source: adapted from Ilbery and Bowler 1998; Atkins and Bowler 2001).

2.7.1 Synthesis of Conceptual Framework: Research Hypotheses

This chapter has brought together a number of theories and concepts about Food Regimes, regional development, and regional supply models. The following six research hypotheses highlight the most significant aspects of the conceptual framework in terms of the research objectives (see Chapter 3) and frame the empirical data collection and analysis in Chapters 4 – 8.

First of all, it is hypothesised that, if existing theory has adequately captured the MSR of the 2nd Food Regime, the case studies of farmer and food processor enterprises in North Cumbria sample will possess the following characteristics:

- large scale, oligopolistic, manufacturing enterprises;
- business development through intensive merger and acquisition activity;
- technical management separated from factory level workers involved in the production of large batches of standardised products for mass consumption;
- intensive application of capital at a farm level; and,
- State and MGR led activity at food processor and farm level.

Secondly, it is hypothesised that, if existing theory accurately captures the MSR of the 3rd Food Regime, the empirical findings from case study farmer and food processors in North Cumbria will present the following characteristics:

- flexible and closely knit production and supply linkages between individual and independent enterprises;
- production activities and supply linkages organised and regulated to meet the demands of a highly differentiated and diverse sets of market and consumer demands;
- use of resources in a cost effective way (as would any other business in any sector of the economy);
- sale of least profitable and non-core enterprises and activities at food processor and farmer level; and,

- farmers involved in diversifying their income earning activities and becoming involved in alternative end markets, for example the supply of non-food products to the general public.

Thirdly, it is hypothesised that if existing theory accurately represents the influence on and approaches to food processors' and farmers' supply linkage organisation and regulation since the 1980s, the farmer and food processor enterprises in North Cumbria will possess the following characteristics:

- vertically disintegrated, closely knit, horizontally and vertically co-ordinated relationships between upstream suppliers to an industry or enterprise;
- flexibility, cost-effectiveness, innovation and timely responsiveness to market and consumer demand are the principles that drive supply linkage development;
- subcontractual relationships between independent enterprises that are able to meet particular market and consumer demand/s at a certain time;
- regional organisation of supply linkages, particularly in more remote regions;
- food processors and farmers involved in either the production of new foods using biotechnology to increase economies of scale and supply mass markets, or the creation of innovative or speciality foods to meet niche market demands;
- MGRs regulate AFS supply linkages; and,
- food safety would be a key principle upon which AFS supply linkage regulation is based with a marginal role for the State in this respect direct since MGRs are more directly involved in designing and implementing supply linkage regulation in this respect.

Fourthly, it is hypothesised that an investigation of the relationships between food processors and farmers in North Cumbria and the region in which they are located will enhance understanding of how food processors and farmers in the UK AFS currently relate to the region that they are located in. A theoretical or empirical account of this is not currently available in the literature. The study establishes how the relationship that the case study farmers and food processors have with the region in which they are located affects their supply linkages and why they relate to the region in which they are located as they do.

Fifth, it is hypothesised that an in-depth investigation of the way in which food processor and farmer enterprises' supply linkages are organised and regulated will reveal what is currently the norm for the sample in question. Furthermore, direct questioning about the sample's perceptions of a hypothetical regional agro-food supply network will provide novel insights about, and deeper understandings of, the potential viability of such a model over their existing supply linkages. It will also extend new regulationist school understandings of how and why the region is used by a case study sample of food processors and farmers. Such models currently exist in the AFS in some regions of the world, but, despite recent policy calls and support for regionalised food supply chain developments, they have not yet been widely and successfully adopted or developed in the UK. Moreover, there is no empirical evidence to suggest that regional supply networks would be viable ways to organise and regulate supply linkage activity for food processors and farmers.

Finally, it is hypothesised that the study's findings will, in sum, provide new understanding about power relations in the UK AFS. A cross cutting issue that will be analysed in the context of the other research hypotheses is the form that power takes in supply linkages in the UK AFS and how that power is exercised, by, and over whom. Existing theory suggests that the State, the MGRs and consumers possess the ability (power and / or influence) to organise and regulate food processors' and farmers' supply linkages. To date, no empirical work has attempted to explore the veracity of each of these theories and whether and how they reflect reality.

Next, in Part 1 of this thesis, Chapter 3 describes how the study addressed these hypotheses.

Chapter 3
Methodology

3.1 Introduction

This chapter describes the purpose of the study and where and how it was conducted. Section 3.2 describes the research objectives and how they relate to the conceptual framework developed in Chapter 2. Section 3.3 describes the study sample and location and, taking into account the research objectives, it also briefly considers why it was appropriate to conduct the study there. Section 3.4 then describes how data was collected and section 3.5 describes how data was analysed and synthesised, using a case study approach. The chapter then closes with Section 3.6 which briefly summarises the chapter.

3.2 Research Objectives

Section 2.7 of Chapter 2 described the research hypotheses, illustrating how they were developed from the conceptual framework. The hypotheses outline the specific areas of concern for this study which are captured within the research objectives. The study had four research objectives:

1. To explore the concepts of regimes of accumulation under advanced capitalism in the context of the UK AFS, with particular reference to the notion of Food Regimes and the 3rd Food Regime in terms of actual food processor and farmer experiences.
2. To investigate how a sample of food processors and farmers currently relate to and use resources within the region in which they are located to assist with business continuity and management.
3. To investigate a sample of food processors' and farmers' personal perceptions of the potential viability of a hypothetical regional supply network model in the UK AFS.
4. To compare theories about who or what has the ability to influence how supply linkages are organised and regulated in the UK AFS (who has power in the UK AFS) by comparing empirical evidence from a sample of food processors and farmers with existing theory.

Research objective 1 was developed with reference to the review of literature in Chapter 2 which considers that the MSR of the 2nd Food Regime has been replaced by a MSR that displays many of the characteristics of post-Fordism. Some authors have referred to this as the new MSR of the AFS under a 3rd Food Regime (see Chapter 2). This study develops and uses in-depth empirical case studies of a sample of MSFPs, SME food processors and farmers in a particular geographical location to enable critical analysis of how and why the UK AFS currently functions as it does. Since they are developed through a small number of in-depth accounts of geographically peripheral farmer and food processor experiences in the UK AFS, the findings in relation to this objective make an original contribution to the debate about the existence of a 3rd Food Regime.

Research objective 2 is concerned with literature (reviewed in Chapter 2) that relates to how, since the 1990s, the region and local areas have come to be seen as a popular basis for economic development in the developed world. The region or local areas are entities that appear to have been marginalised from the mainstream UK AFS under the MSR of the 2nd Food Regime. After FMD in the UK in 2001, particularly at farm level, they are however emerging as the basis for future development. The viability, sustainability, and validity of the region as a basis for the development of the UK AFS appears however to be under explored. This study therefore makes an original contribution to this area of economic development theory research.

Research objective 3 relates to the literature about local or regional supply linkages and networks. As described in Chapter 2, this literature has recently received much attention within academia, and the public sector. To date though, very little attention has been paid to how appropriate, viable and suitable such a model is for the UK AFS. Indeed, as highlighted above, since FMD in the UK in 2001, the regional development model is being seen as a way to re-empower farmers and SME food processors in rural locations. Work that investigates local and regional foods has previously tended to focus on consumer demand for, and attitudes towards, regionally branded foods and associated marketing initiatives. It has not sought to understand or critically analyse the opportunities for, and constraints to, local or regional based development for the UK AFS. From the perspectives of those that would supply the regional or local system (namely, the farmers and food processors), the model presents a very different way to organise and regulate supply linkages in comparison with activity in the mainstream UK AFS. This study contributes novel understandings to the currently high profile debate about local and regional agro-food supply networks or groupings.

Finally, research objective 4 relates to literature which reports that the State, MGRs and consumers are the only participants in the UK AFS that have the power to influence the organisation and regulation of supply linkages between farmers and food processors in the UK AFS. These theories are used within the policy rhetoric surrounding food and farming reform in the UK post FMD 2001 however, what is more, they appear to be accepted without a great deal of question. Little empirical work has been carried out to test such theories and how and why some participants in the UK AFS are more able to influence supply linkage organisation and regulation. This study sought to do that by comparing the empirical findings with the theories in that literature, to provide case study specific reflections on who and what influences the organisation and regulation of farmers' and food processors' supply linkages in North Cumbria.

The remainder of this chapter describes how the research objectives influenced the selection of the study sample and location; data collection; and, data analysis and synthesis.

3.3 The Study Sample and Location

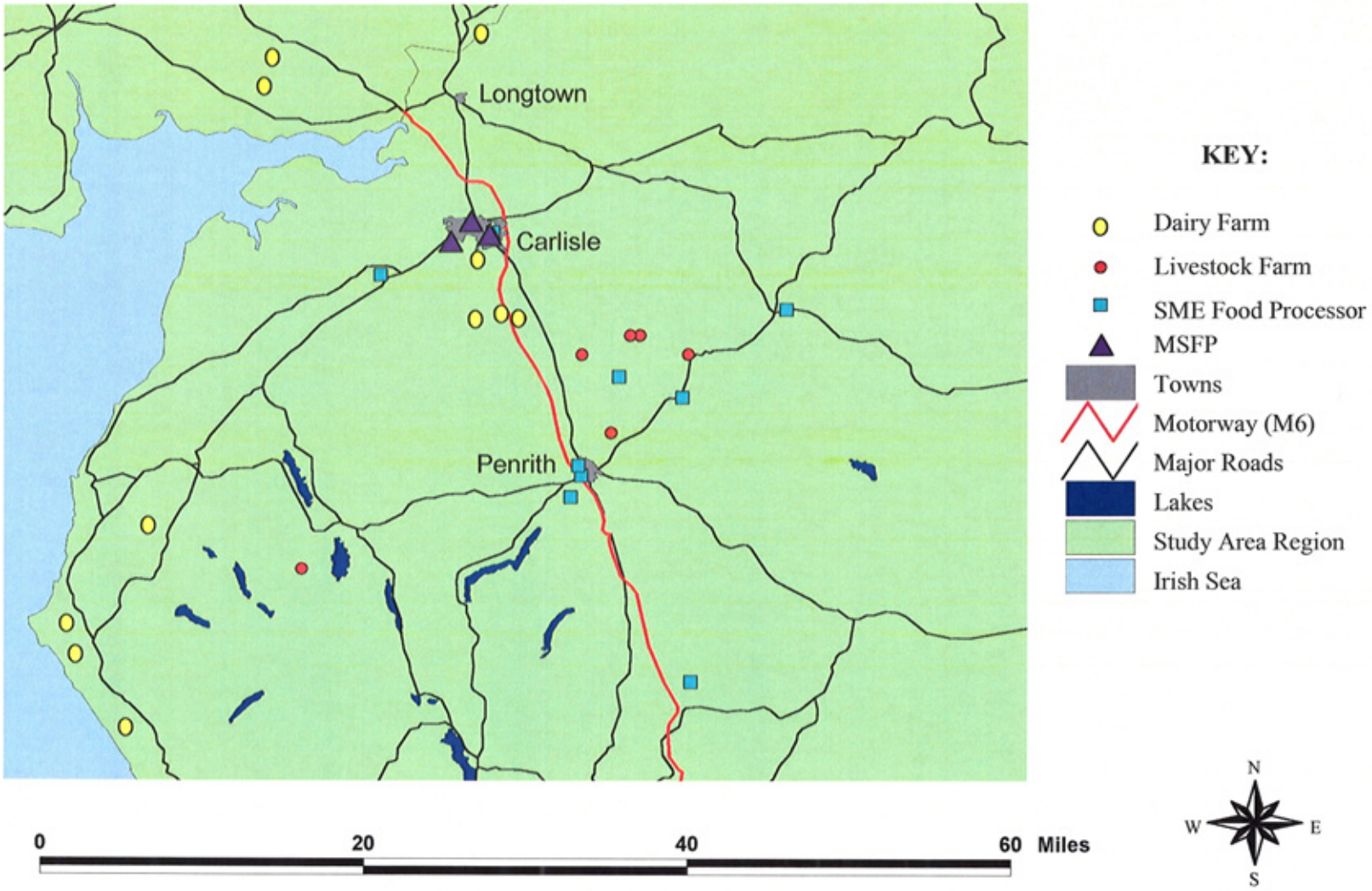
Figure 3.1 illustrates the study area and sample locations. The research objectives required the use of a location with a population of both farmers and food processors. North Cumbria was selected as the study location in view of that necessity and due to the importance of the AFS to the economy in North Cumbria.

The study sample comprised three MSFPs, nine SME food processors, eleven dairy farmers and six livestock farmers. A sample of this size was used to enable in-depth analysis of each of the cases presented in the sample (see section 3.5). Literature on the subject of sample creation asserts that this is an appropriate approach to take for a study of this nature and type. For example, Patton (1990:184) argues:

There are no rules about sample size . . . Sample size depends on what you want to know, the purpose of the inquiry, what's at stake, what will be useful, what will have credibility, and what can be done with available time and resources . . . (Patton 1990: 184).

The sample was purposely selected (see Patton 1990; and, Robson 1993), to enable high quality, in-depth information to be collected, which would subsequently be used to produce individual descriptive case studies for each enterprise in the sample (see section 3.5). This approach was appropriate for the selection of a sample for case study based research (see Eisenhardt 1989; Feagin *et al.* 1991; and, Stake 1994).

Figure 3.3 Map of Study Area and Sample Locations



To draw the sample together, food processors were contacted via Carlisle City Council and the farmers were contacted via one of the SME food processors and one of the MSFPs, using a snowball sampling approach[28]. Following preliminary interviews with food processors, the food processors were asked to nominate farmers who would potentially be interested to participate in the study and these were then contacted by the researcher.

It is acknowledged that the sampling process used may have introduced some bias to the data collected since farmers were nominated by food processors who were their end customers. This was however the only way that a sample of farmers who currently supply ingredients to food processors in North Cumbria could be created, to gather data about current intra-regional supply linkage organisation and regulation. The inclusion of farmers that supply to one of two food processors in the study's sample also permitted in-depth investigation of the nature, structure, organisation and regulation of existing linkages between farmers and food processors in North Cumbria. It enabled analysis of how and why such a mode of supply linkage organisation and regulation existed between these enterprises in this location, in advance of any political support of such a model to achieve sustainable and equitable development in the UK AFS.

The remainder of this section illustrates the key characteristics of the economy in North Cumbria and Cumbria as a whole and the profile of the AFS (specifically in terms of the food processing and farming sectors) in that economy.

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[28] In this instance, a specific request for a maximum of 10 farmers as interviewees for the study was submitted to the food processors whom they supply raw agricultural produce to, since this was the only way that a sample of such farmers could be attained. It was essential that the farmer interviewees were suppliers to food processors interviewed in this study so that an illustration and analysis of the supply linkage interconnection between them could be achieved from discussion with both sides of the linkage. Such an understanding would thus provide more detail of the specific interactions that are characteristic of these supply linkages in this location. So, it was on this basis that a sample of farmers to be interviewed was requested from each of the food processors. Sample characteristics were requested to be: (a) that the farmers supplied to the food processors, and (b) that they would be willing to talk about their supply linkages and business enterprise when and if asked. Thus, this is how the sample was *purposively* secured.

3.3.3 Characterising the Study Location

The Cumbrian economy is largely centred on distribution and tourism which provides 26% of the County's employment, and manufacturing provides 23% of the County's employment. (CRED 2001a, 2001b; Cumbria County Council 2001; Cumbria Economy Forum 1998). The AFS is also a significant sector of the Cumbrian economy. Excluding nuclear, the food and drink sector is the largest manufacturing sub-sector in Cumbria (Peck *et al.* 2000). There is a number of different types of multi-site food processors (MSFPs) and small to medium sized (SME) food processors and large, medium and small farm enterprises in Cumbria. Figures 3.2 and 3.3 below provide brief details about the composition of the MSFP and SME food processor sectors of the Cumbrian economy, demonstrating a concentration of these enterprises in North Cumbria. The agricultural sector is also a significant employer in Cumbria (see Figure 3.4).

Figure 3.2 The Major Food Processors in Cumbria.

Company Name	**Location**
Cavaghan & Gray	Carlisle, North Cumbria
McVities	Carlisle, North Cumbria
Nestlé	Carlisle, North Cumbria
Carr's Flour Mills	Silloth, North Cumbria
Lakeland Food Ltd.	Kendal, South Cumbria

(Source: Adapted from Peck *et al.* 2000).

Figure 3.3 An Example of SME Food Processor Activity in Cumbria

Company Name	**Location**
Bakers and Confectioners	
Cartmel Village Shop	Grange over Sands, South Cumbria
The Village Bakery	Melmerby, North Cumbria
Dairy Products	
Calthwaite Dairy Products	Carlisle, North Cumbria
Sillfield Farm Products	Kendal, South Cumbria
Fish	
Newmills Trout Farm	Brampton, North Cumbria
Hawkshead Trout Farm	Hawkshead, North Cumbria
Meat, Poultry and Game	
Burbush	Penrith, North Cumbria
Cranstons	Penrith, North Cumbria
Preserves, Condiments and Honey	
Cumberland Mustard	Alston, North Cumbria
Demels	Ulverston, South Cumbria

(Source: adapted from Peck *et al.* 2000).

Figure 3.4 Characteristics of Farming in Cumbria and Comparison of Change between 1997 and 1999

In 1997...	In 1999...	Reflecting on Change 1997 - 1999
There were 6,220 farm holdings and 459,100 hectares of land in agricultural use in Cumbria.	There were 6,258 holdings and 454,922 hectares of land in agricultural use in Cumbria.	More farm holdings have been established over time and the area of farmed land has also increased.
Each farm covered an average area of 74 hectares. 64% farms were wholly owned, and 14% were wholly rented and over 70% of all farms in Cumbria were family owned and run.	Each farm covered on average 73 hectares. Roughly 35% of agricultural land was rented, and 65% was owned.	Farms have reduced in size over time and a high number of farmers both own and rent land, demonstrating flexible approaches to accessing and using land for the farm enterprise.
The principal activity of 55% of farms in Cumbria was cattle and sheep production and dairy was the principal activity of 26% of all farms. 16% of farms have a mixture of principal income earning activities / production types.	Dairy was the principal activity of 24% of al farms. 17% of farms have a mixture of principal income earning activities / production types.	Mixed farms have become more popular over time, yet cattle and sheep production remain the dominant forms of agricultural production in Cumbria.
On average, farms in Cumbria employed 2.3 persons. Meaning that, on average, each person farmed an area of 32 hectares.	On average, farms in Cumbria employed 2.2 persons. Meaning that, on average, each person farmed an area of 33 hectares.	The average area of land farmed per person per farm increased marginally between 1997 – 1999. The average number of people working on each farm was marginally reduced in 1999. Farm work appears in principle therefore to have become generally less intensive.

(Source: adapted from analysis of MAFF's Agricultural Census (June) reported in CRED 2001b; CRED 1999; and, DEFRA 2003).

The North West Regional Development Agency (NWRDA) has acknowledged the contribution that the AFS makes to regional development in its administrative region and has made attempts to support its development. The Cumbria Inward Investment Agency (CIIA), one of the principal economic development agencies in Cumbria, also recently undertook work to underpin the development of the AFS in Cumbria (see Peck *et al.* 2000). They defend their decision to do this by asserting that:

> ***Cumbria is today home to some of the country's most respected food manufacturers,*** *producing a wide range of products which are distributed daily to national and international markets . . .* ***Cumbria is the ideal business location for food manufacturers*** *. . . As a region, Cumbria benefits from low cost land and property prices, an available and skilled labour pool at competitive costs, strong staff loyalty and low turnover. It is these factors which have encouraged a number of leading food companies to locate in the region...* (Invest in Cumbria, September 1999: 7) (my emphasis).

More specifically, the CIIA considers **Cavaghan and Gray, McVities** and **Nestlé** (each of these was included in the MSFP sample of this study) as companies that have attracted other businesses to the area (see CIIA 2001; Invest in Cumbria 1999: 7). Barke and Peck (1999) have also noted this trend.

The AFS is, thus, a contributor to the development of the Cumbrian and more specifically the North Cumbrian economy. Indeed, when the empirical element of the study was being planned, Carlisle City Council was, with larger food processors in Carlisle district, developing an initiative that they hoped would help bring about AFS growth and development. The initiative, 'The Carlisle Food Forum', was developed by the Economic Development Unit at Carlisle City Council in 1998 to improve the growth and development potential of the local (within a 50 mile radius of Carlisle) food processing sector. Its existence was entirely incidental to this study, and it was a milestone initiative in the context of this study's overall objectives since it attempted to bring large (including **Cavaghan and Gray** and **Nestlé**, two of the MSFPs in the study's sample) and small local food processors and farmers together, to share their knowledge and experience. It was also one of the first food sector initiatives to bring together local public and private sector support for the development of the local AFS[29]. Unfortunately, because of a lack of private sector interest, the initiative did not develop as intended. In itself this outcome was of interest to this study, which in part sought to identify how food processors feel about working in collaboration with other food processors in a regional context.

[29] Cavaghan and Gray was the main private sector player, acting as a mentor to provide information and assistance to smaller food processors in the local area. The NFU also participated in the Forum, as did North West Fine Foods (an organisation that provides marketing support and opportunities for smaller scale food processors in the north west of England) and public sector support came from Carlisle City Council and the Northern Development Company (now subsumed within One NorthEast the RDA for the North East of England).

With regard to the farming sector specifically, as mentioned above, this sector also has a high, though now (post BSE in 1996 and FMD in 2001) diminishing, profile in the Cumbrian and, specifically, the North Cumbrian economy. Figure 3.5 briefly illustrates Cumbria's farming characteristics and how these have changed between 1997 – 1999. There is, however, reason to be concerned about the potential sustainability of farming in Cumbria. The restructuring of the red meat and dairy markets in the UK in recent years as a result of BSE has created cash flow problems for all farmers involved in those markets. In addition, as noted above, Cumbrian agriculture (primarily livestock and milk production) was significantly affected by FMD in 2001 (see Bennett *et al.* 2002). Across the administrative region of North West England generally, the NWRDA has however taken such circumstances into account when considering the nature and scope of future development in the North West of England's (including the Cumbria) AFS (see NWRDA 2000b, 2000c). For example, the NWRDA has developed a regional 'Agri-Food Strategy' and 'Action Plan' that incorporates measures to deal with agricultural diversification and the creation of new markets for agricultural products (Peck *et al.*2000; NWRDA 2001). In 2000 the NWRDA also made a fund available to help farmers in the North West of England meet the cost of diversification via the conversion of farm buildings and land (see NWRDA 2000a).

The AFS (and the food processor and farming sectors within it) is therefore a significant part of the North Cumbrian economy. State agencies and the local authority in North Cumbria have previously directed support at the AFS, suggesting that there is a perceived need for their further development. One way to achieve this may be, according to the policy rhetoric and action plans following FMD 2001 in particular, to support the creation of regional supply networks between farmers and food processors. As noted in Chapter 2 though, there is little evidence to suggest that this model of supply linkage organisation and regulation is viable in all locations and there has been little critical analysis of that to date. Furthermore, 'The Carlisle Food Forum' also failed to achieve similar objectives. This study sought however to provide deeper understanding about whether such a model would be viable in North Cumbria or not, and under what circumstances. Section 3.4 describes how data was collected and analysed to meet the research objectives.

3.4 Data Collection

Figure 3.5 below illustrates how data for the study was collected and analysed. The remainder of this section elaborates upon this diagram, explaining how data was collected, analysed and synthesised using qualitative research methods.

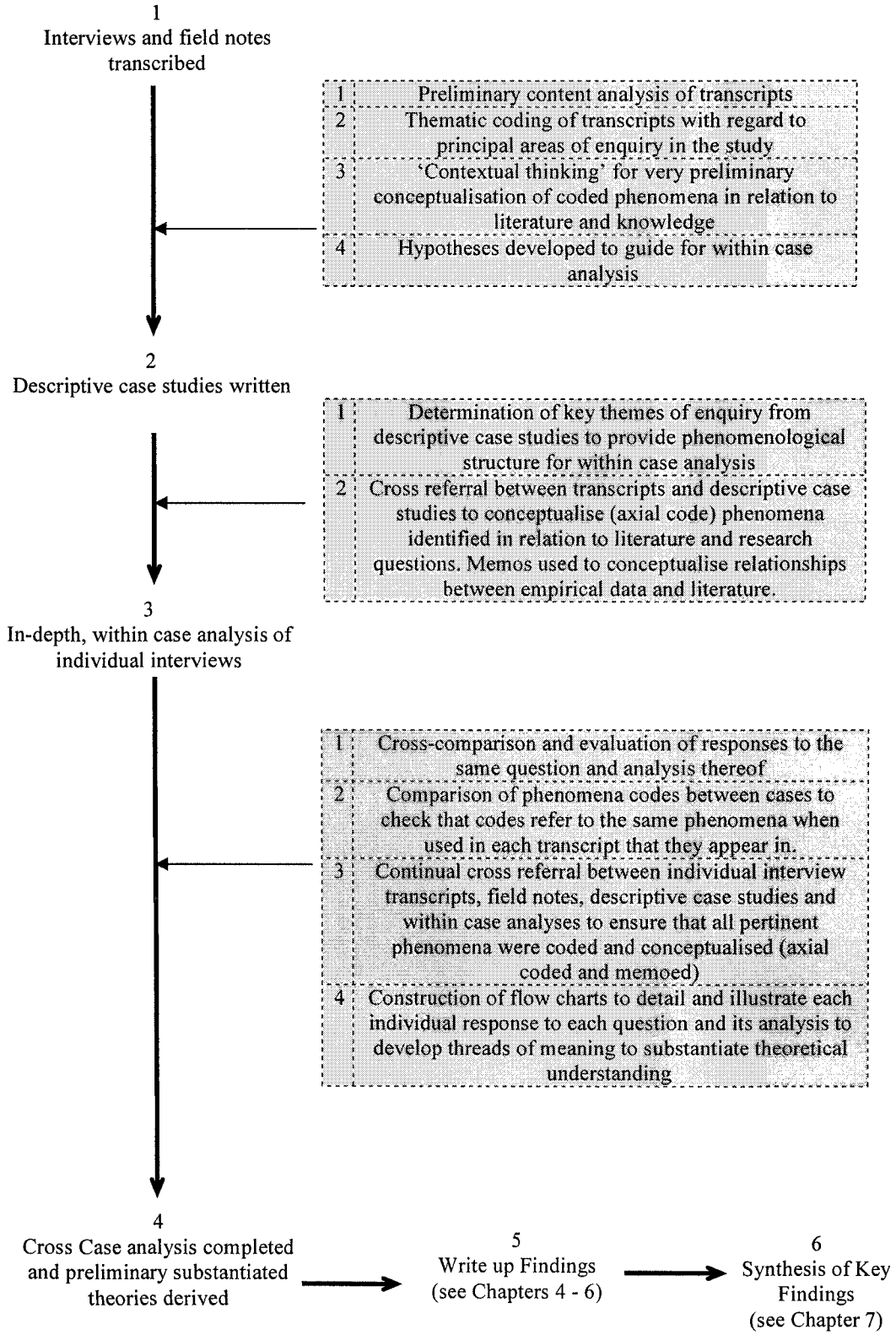
3.4.1 Qualitative Research Methods

Qualitative research methods were used by this study. Such methods do not seek to determine or infer statistical significance or patterns (Denzin and Lincoln 1994; Patton 1990; Stake 1995). Instead, they enable characterisation of an observable event and establish an understanding of it in relation to how and where it was observed (Strauss and Corbin 1998). In sum, qualitative research methods and techniques were most appropriate for this study because,

> . . . [they] *permit the* [researcher] . . . *to study selected issues in depth and detail* . . . [and] *typically produce a wealth of detailed information about a much smaller number of people and cases* [than quantitative research methods] . . . *This increases the understanding of the cases and situations studied but reduces generaliseability* (Patton 1990: 13-14).

The remainder of this section describes how qualitative data collection and analysis was applied to this study to achieve the research objectives detailed in 3.2.

Figure 3.5 Data Analysis: Stages, Procedures and Tasks



3.4.2 Pilot Study

Prior to the main phase of data collection, a pilot study was undertaken with one MSFP, one SME food processor and six farmers, all of which were chosen at random from a selection of contacts provided by North West Fine Foods (the North West of England's Regional Food Group (RFG)), the NFU, and Carlisle City Council. All enterprises in the pilot study were located in northern Cumbria, and were interviewed face to face (all farmers) and by telephone (all food processors). The pilot interviews helped to identify the weaknesses in, and efficacy of, the interview schedule, as well as the best approach to be used for interviewing the sample (see Robson 1993; Yin 1994). For example, although the interview schedule included pre-formulated questions, it was found to be more appropriate for the questions to be phrased according to each respondent's understanding of them and their general ability to respond to them[30]. The sequence of the questions was also found to be logical and acceptable for the interviewees[31]. Section 3.4.3 describes how the interviews were carried out for this study.

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[30] That is, with regard to the type of information that might be offered, not the content of the information that might be offered.

[31] The sequence of coverage of issues was maintained throughout each of the pilot and proper interviews, since the questions were deliberately ordered to range and develop from impersonal to more personal and subjective questions (see Patton 1990 for reference to appropriately sequencing issues in interviews).

3.4.3 Interviews

As with the pilot interviews, a semi-structured interview schedule (see Appendix 7 - 9) comprised of pre-prepared questions and multiple-choice answers[32] was used for the proper case study interviews. This ensured full coverage of all of the issues in the study's conceptual framework. Patton (1990; also see Yin 1994) asserts that this is an appropriate approach to take when conducting qualitative analysis.

Interviews with food processors were carried out in two stages since data analysis after a first round of interviews showed that information relating to the key themes of the research questions had been touched upon, but lacked detail and depth due to the demands of the interview schedule. Therefore, all food processors were asked to participate in a second round of interviews to gain deeper understanding about the data collected. Interviews with farmers comprised one stage only. In food processor and farmer interviews alike, when respondents offered additional detail and facts that enriched responses, further (unscheduled) questions were asked to gain more precise and detailed understanding of the phenomena in relation to the conceptual framework and the research objectives.

[32] Although the interview schedule included pre-formulated questions, it was found during the pilot interviews to be better for the questions to be worded and posed in a particular way for each respondent according to their individual circumstances. When the question posed was not easily understood it also helped that there was a pre-prepared question for the interviewee to refer to and to read and understand each question at their own pace. During the data collection proper the schedules remained as they had been during pilot study, with pre-prepared questions and lists of multiple choice answers to some of the questions which helped to improve interviewees' understanding of the questions. That is to say, multiple choice questions were offered where the content matter was complex and where the farmer chose to use a response as listed they frequently offered enhanced details, and if not they were asked for further details to explain why they had replied thus.

Interviews with food processors and farmers lasted between one and two hours, and each interview was tape recorded to ensure full and accurate recording of data for subsequent transcription and analysis (see Miles and Huberman (1994) for a discussion of the use of tape recorders in the field; also, see Patton (1990)). During the course of the interviews, *ad hoc* field notes[33] were also made to record impressions gained from the interviews. This improved data collection accuracy and aided conceptualisation of findings during individual and cross case data analysis (see Carney *et al.* 1997; Miles and Huberman 1994; Patton 1990; Strauss and Corbin 1998; and, Yin 1994). Strauss and Corbin (1998) assert that focusing on the data in this way during data collection is positive and helpful since it,

forces researchers to consider the range of plausibility, to avoid taking one stand or stance toward the data ... the data . . . are being allowed to speak (Strauss and Corbin 1998: 65).

Section 3.5 describes how individual and cross case data analysis was carried out.

3.5 Individual and Cross Case Data Analysis

Figure 3.5 (above) illustrates how case study data was analysed and synthesised. Below, section 3.5.1 describes how in-depth interview data was recorded and stored, and section 3.5.2 describes how that data was analysed using the conceptual framework. Finally, section 3.5.3 describes how the findings were synthesised to clearly relate to the research objectives.

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[33] For example, notes were made about issues that food processors and farmers had been especially vocal and emotive about since these were considered to be issues that the interviewees had strong feelings about and thereby potentially related to power relations in their supply linkages. With farmers, these issues included discussions about BSE and the government's treatment, and perceived lack of defence. For SME food processors they included comments about the time required to manage their businesses efficiently and effectively.

3.5.1 Data Recording and Storage

There is growing support for computer aided qualitative data analysis (see Barry 1998; Buston 1997; Kelly 1997[34]). Alongside that, there is however much support for organising and categorising data by hand or using a word processing package (see for example Carney *et al.* 1997; Denzin and Lincoln 1994; Dey 1993; Miles and Huberman 1994; Riley 1990; Strauss and Corbin 1998). Such an approach is seen as enabling the analyst to be aware of how each element of the data relates to the rest of the data from the same respondent, thus encouraging the development of a rich familiarity with the data (see Eisenhardt 1989). In view of that, case study interview data was analysed by hand for this study.

The creation of case studies from empirical data can help organise and sort data in relation to the key research question themes (see Patton 1990). Multiple case studies also help develop in-depth and substantive understandings of activity in a particular location and time (see Miles and Huberman 1994; Stake 1995; Yin 1994). The decision to use the case study method for this study was made further to reflection on the work of Stake (1995) and Yin (1994) specifically and further to a review of how recent studies of the AFS have been conducted.

[34] For example, 'ATLAS.ti', 'Ethnograph' (see Skerratt 1998), 'N.U.D.I.S.T', 'winMAX' and 'Code-A-Text'.

A very strong argument for the use of case study approaches specifically to analyse agro-food systems in particular was presented by Hilary Tovey in her paper about the organic movement in Ireland (see Tovey 1997). This paper greatly influenced the choice of methods used by this study since, in it, Tovey (*ibid.*) explains that case study specific activity is naturally representative of the location and time in which it occurs. Moreover though, when that case study activity is conceptualised as an example of activity within a region, a nation, and the world, it can be studied to reveal understanding about the circumstances in which it operates more broadly. Thus, Tovey (*ibid.*) argues that a small number of individual case studies can shed light on the circumstances they occur in through analysis of the case in relation to the sector or sphere it is related to more generally. For this study, the use of the case study method enabled reflection on the experiences and perspectives of a small number of food processors and farmers in North Cumbria. More widely though, and as argued by Tovey (*ibid.*), case specific data provides insights into a sample of the UK AFS population. To substantiate the theory developed with this method, in this location, and with this sample, these insights could be explored by future research, in different circumstances, and with different samples, in other locations (see Chapter 8). Section 3.5.2 describes how the case studies were analysed in this study.

3.5.2 Data Analysis

Many texts describe how to carry out qualitative data collection, but relatively few describe how to analyse qualitative data. Coffey and Atkinson (1996) suggest that the coding and organisation of data into meaningful categories of phenomena for data analysis is taken for granted as a simple procedure, and warn against such a presumption. Strauss and Corbin (1998) also caution against this.

In this study, the semi-structured, in-depth interview schedule aided preliminary qualitative data analysis because it provided an immediate guide to the categories of information collected. The way in which individual respondents referred to each theme did, however, differ. Careful recording of reflections, and conceptualisation of how themes raised by interviewees related to the conceptual framework, was therefore crucial to draw out in-depth insights about the individual cases that comprised the sample. A way to standardise the approach taken to analysing the data and storing that analysis so that clear relationships could be identified between the emerging theory, the themes raised, and the conceptual framework was therefore required, developed, and used.

First of all, as illustrated in Figure 3.5, each interview was transcribed and divided into discrete categories of information prompting an initial in-depth reading of each of the interview transcripts. A descriptive case study was then constructed for each respondent to organise the data in a tabulated format (see Figure 3.6). This aided preliminary analysis, since it helped to generate in-depth insights into the data and development of a 'rich familiarity' with each case (see Eisenhardt 1989; Robson 1993).

Once transferred into that table, within case data analysis was undertaken by reflecting on each interviewee's response to individual questions and categories of information. This stage of the analysis revealed a number of different phenomena, which were each given a code label that indicated how the data and phenomena related to categories of information and issues in the conceptual framework. When a subcategory of information was revealed, it was given an 'axial code' which illustrated how it related to the broader category of information under discussion. This procedure was repeated for each response and piece of data from the respondents' interview transcripts.

Figure 3.6 An Example of How Within Case Analysis was Carried Out

Question posed	*Code* relating to ultimate response	*Axial code* to detail why they gave this ultimate response	Ultimate response given and conceptual memo
Opinion of being part of an information/ produce exchange network between farmers and food processors in Cumbria	No support for the idea	Status quo preferred	• [RESP]: He says he would not be willing to be part of such a network because: *he prefers his own direct linkages and communication with his end customer via the auction mart.* • [MEMO]: Indication of preference for independent and personal action has had bad experience with deadweight contract selling in the past and is determined to develop his farm as he would like it to change.

(Source: Author's fieldwork, January 1998).

This method ultimately provided a means of easily identifying with what each individual respondent had said, in response to each question, with regard to the particular phenomena raised, and how that related to a more general theme in the data and conceptual framework. Next, the theory emerging from each individual case study was considered in relation to each of the other case studies and the conceptual framework.

Cross (multiple) case analysis, enhances the probability of research capturing novel findings, which may exist in the data collected (Eisenhardt 1989; also see Miles and Huberman 1994; Stake 1994). In sum, this made it possible to explore and develop the theory emerging from the individual case studies in relation to the research objectives. To do this accurately, it was crucial that all concepts were compared and evaluated in terms of the conceptual framework. Within that, negative comparisons and dissimilarities were as important to the development of theory as similar and comparable findings: if conflicting findings were ignored, the robustness of the theory would have been potentially questionable (see Eisenhardt 1989 for a discussion about this). A means of thoroughly exploring each and every response to every question posed was therefore required. First of all, each of the within case analysis tables was cut into individual rows of data which were subsequently collated according to the category of information that the data related to in the conceptual framework. Tables were then further subdivided into separate piles of responses for each question within that category, according to the axial codes. Once complete, each response for every question posed was compared against all cases and the conceptual framework. Once that stage was complete, it was necessary to synthesise the findings to identify with the theoretical relationships between the in-depth interviews and the study's conceptual framework and research objectives. This is described in 3.5.3.

3.5.3 Synthesis of Findings

Synthesis is the final stage of data analysis: it allows research findings to be related to the conceptual framework that the research was developed upon.

To begin to understand how the findings related to the conceptual framework, conceptual flow charts[35] were designed and used to synthesise data and analysis and assist with the development of a theory about each response as recorded in the cross case analysis. Each individual flowchart comprised details of the answers given by all respondents to individual questions and a conceptualisation of each element of each answer in relation to the conceptual framework. By using this approach, perceived commonalties and differences between individual responses were easily identified, aiding synthesis of cross case findings.

These flow charts[36] provided the 'conceptual building blocks' which Strauss and Corbin (1998) suggest link the cases in question to the theoretical understanding of the responses given in relation to the conceptual framework (see Chapters 4 – 7). In sum, the use of a conceptual flow chart facilitated effective management of the in-depth analysis of a large volume of data from each respondent for each question asked. It enabled reduction of the data, whilst the retaining the essential meaning of the interview data, in a diagram that detailed responses to each question. It did not provide generalisations about the interview data.

To close this section, the researcher acknowledges that unique samples were used, and the interpretation of collected data and the theory developed from that data was based on case studies and the findings. They are therefore not directly transferable to another sample of farmers and food processors in a different location. However, as discussed under 3.5 above, these case study findings and theory contribute novel understandings and theories to debates in relation to the conceptual framework in Chapter 2 and the research objectives, and that was what the study sought to do.

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[35] Stage 4 in Figure 3.5 above. See Appendix 11 for a sample of the conceptual maps that were constructed.
[36] Flowcharts are only one way of illustrating the relationship between findings, research questions and the conceptual framework. Miles and Huberman (1994) provide a comprehensive review of possible ways to use diagrams to help analyse data and present findings.

3.6 Summary

This chapter has described what the study set out to do and how it was done, in line with the conceptual framework as described in Chapter 2. Picking up the key conceptual themes from the research hypotheses summarised in Chapter 2, section 3.2 described and justified the four research objectives. To recapitulate, the research objectives were:

1. To explore the concepts of regimes of accumulation under advanced capitalism in the context of the UK AFS, with particular reference to the notion of Food Regimes and the 3rd Food Regime in terms of actual food processor and farmer experiences.
2. To investigate how a sample of food processors and farmers currently relate to and use resources within the region in which they are located to assist with business continuity and management.
3. To investigate a sample of food processors' and farmers' personal perceptions of the potential viability of a hypothetical regional supply network model in the UK AFS.
4. To compare theories about who or what has the ability to influence how supply linkages are organised and regulated in the UK AFS (who has power in the UK AFS) by comparing empirical evidence from a sample of food processors and farmers with existing theory.

Sections 3.3 then described the study sample and location and how it related to the research objectives. Then section 3.4 described how data was collected and section 3.5 described how the in-depth interview data was analysed and synthesised in relation to the study's conceptual framework.

This chapter closes Part 1 of the thesis. Next, Part 2 of the thesis provides detailed descriptions of the key findings from in-depth interviews with food processors and farmers. Following that, Part 3 of the thesis synthesises the key findings and considers how they relate to existing literature, theory and policy about the UK AFS.

Part 2

Case Study Findings

Chapter 4
A Case Study of Multi Site Food Processors in North Cumbria

4.1 Introduction

This chapter considers the findings from in-depth interviews conducted with three Multi-Site Food Processors (MSFPs – Company B, Company A and Company C) in North Cumbria. To address the research objectives (see Chapter 3, section 3.2), it uses the case study findings to extend understandings of:

- How and why the MSFPs came to be established and developed in North Cumbria under advanced capitalism and critically assess whether this occurred as described in the Food Regimes literature.
- The relationship between MSFPs and the region in which they are located in terms of their use of resources available there.
- The case study MSFPs' perceptions of the viability of a hypothetical regional agro-food produce and information supply network.

Literature relating to the political economy of the AFS, agri-business management and agricultural economics (see for example Hamm 1982; Ray 1994) has addressed the way in which multi-national food processors have generally evolved under advanced capitalism. Such work does not however explain why they evolved as they have and to what extent the experiences of individual MSFPs differ. Acknowledging the potential differences in the development experience of different MSFPs will provide detailed understanding of the extent to which the recorded characteristics of the 2nd and 3rd Food Regimes and Fordism and post-Fordism regimes of accumulation (see Chapter 2) accurately reflect actual MSFP experiences. This enables a critique of the extent to which it may be appropriate to understand and conceptualise supply linkage organisation and regulation in terms of the concepts of regimes of accumulation of Food Regimes. That critique is developed with case study findings in section 4.2.

Secondly, agricultural geography literature largely appears to accept that the composition and type of agriculture in a region determines the nature, type and extent of wider AFS

activity therein (see Chapter 2). This implies that it is reasonable to assume that the nature and type of AFS activity in a particular location is restricted by the availability of food that is produced in that location. The availability of a range and variety of services (for example, road networks, marketing organisations and ICT) to support AFS business continuity and development under advanced capitalism in the global economy could however challenge that assumption. Description of whether, how, why, and to what extent the case study MSFPs use resources available within the region in which they are located to assist their business continuity and development enables theorisation about the possible contemporary role of the region in the AFS. That theory is developed with case study findings in section 4.3.

Finally, the hypothetical concept of regionalised AFS supply networks and linkages are gaining recognition as a way to redistribute power and marketing opportunities to farmers in the contemporary UK AFS. Regionalised industrial supply networks have been used to bring about economic development in the UK in the relatively recent past (Cooke and Morgan 1992; Gertler 1992; Saraceno 1994; Storper 1995). Existing literature does not however critically evaluate what potential there is to include MSFPs in such activity. Describing the MSFP sample's perceptions of the viability of that model enables theorisation of how appropriate it could be to use the regionalised supply network model in the AFS. That theory is developed with case study findings in section 4.4.

4.2 MSFP Company Establishment and Development

This section describes how the case study MSFPs (**Company A**, **Company B**, and **Company C**) came to exist in North Cumbria; what they do in the AFS; their relative positions in the food processing sector; and, their end markets.

4.2.1 Establishment and Business Development in North Cumbria

Each of the three MSFPs had pursued a different path to establishment in North Cumbria. **Company A** is the largest food company in the world (Nielsen 2002), established in Vevey, Switzerland in 1867. It undertook intensive merger and acquisition activity to expand its business activities between 1947 and 1973, and in 1967 **Company A** established its processing site in North Cumbria. Globally, **Company A** operate 509

factories and employs some 230,000 people. **Company B** is also a large food processor. It is the UK's largest biscuit manufacturer baking biscuits twenty four hours a day, seven days a week, and was created through a merger of two major UK based biscuit makers in 1948. **Company B** was also involved in intensive merger and acquisition activity between the late 1940s and early 1970s (1948 – 1974 specifically). **Company B's** site in Carlisle was established in 1972, following the acquisition of a biscuit company whose most profitable product ranges were retained and developed by **Company B**. Unlike the other two MSFPs however, **Company C** was established in Carlisle in 1912, through an alliance of three local farmers who came together to process their own livestock. In 1919 one of the partners left the company, and it adopted its current trading name. **Company A** and **Company B** are both controlled by a global holding company and, at the time of data collection, **Company C** was controlled by its head office in Cumbria.

Table 4.1 MSFP Creation and Establishment in North Cumbria

MSFP	Date and location of establishment of holding company	Date of site establishment in North Cumbria	Number of Employees in North Cumbria
Company A	1867 in Switzerland	1967 in Dalston, near Carlisle	288
Company B	1948 in England	1972 in Carlisle.	1400+
Company C	1912 in Carlisle, England.		1500

The three MSFPs have largely pursued different approaches to creating, enhancing and developing the scale and range of their activities in North Cumbria. There are, however, some similarities between **Company A** and **Company B**. For example, between the 1980s and the present day, the respective holding companies for **Company A** and **Company B** divested of loss making businesses and concentrated on developing the market share of their most profitable businesses and lines. Such activity and the motivations behind it are reported in the literature (for example, see Hall and Sweeney 1986; Howe 1983; Welsh 1997). In contrast, until 1993, **Company C** owned and operated its own farms as ingredients suppliers, but sold all of these by 1998 when it began procuring primary ingredients from farms that it did not own (more details about this appear in Section 4.2.2).

This allowed them flexible and easy access to primary ingredients and the ability to focus on processing activities, with substantial direction from their principal end customer (Marks and Spencer). Since April 2000 though, **Company C** has acquired and / or merged with other food companies to extend their presence in, and market share of, other food product markets. This was done for a number of reasons: to reduce their substantial dependence on one principal end customer; to ensure readily available supplies of specific products for their principal end customer; and, to ensure ready availability of required inputs. Such activity is not reported in the literature about recent MSFP business development.

In further contrast between the case studies, during the 1990s, **Company C** experienced dramatic changes to their ownership and control, but **Company A** and **Company B** did not. In March 1998, after primary data had been collected for this study, **Company C** was taken over by one of the UK's largest food companies (Northern Foods Plc.). The new holding company has a head office in Hull, but **Company C's** Carlisle site remains under the control of their head office in Carlisle. Since being acquired by the holding company, the site in Carlisle has been extended, and, at the time of the take-over[37], Northern Foods was a principal supplier of foods to Marks and Spencer Plc. Northern Foods' acquisition of **Company C** therefore further embedded **Company C** in supply linkages and trading with the end customer that they had recently taken action to distance themselves from.

4.2.2 Food Processing Activities and End Market Outlets

Details about the type of food processing that the three MSFPs are each involved in, and their end market outlets, demonstrate the relative position of these MSFPs in the UK AFS. For example, the findings described below illustrate, *inter alia*, the degree to which the MSFPs are dependent on specific end customers for access to end market outlets (retailers) in the UK AFS. Table 4.2 summarises what the MSFPs produce at their sites in North Cumbria, the brands that their produce is sold under, and the retail outlets they serve.

[37] Given that the interview was undertaken prior to its take over by Northern Foods Plc., the information used in this thesis relates to the company at that time.

By way of explanation for their activities in this regard, interviews revealed that **Company A** do what they do to help gain and expand their holding company's share of the processed milk and processed milk products' markets. **Company B** had a similar opinion and explained that they essentially seek to be active in most profitable end markets for their key products. A representative from the Carlisle site explained:

As most biscuits are sold through a small number of large, powerful retail outlets, we cannot afford to miss out on the tonnage available. [However,] (b)*ottom line profit is* ***certainly not*** *the driver*...(Company B, September 1997) [Emphasis by interviewee].

These findings are characteristic of accounts of the search for economies of scale through merger with and acquisition of smaller food processors by MSFPs during the 2nd Food Regime (see Bowler 1992; Foord *et al.*1992; Hamm 1983; Hughes 1996; Ilbery and Bowler 1998).

In contrast, **Company C** explained that their principal end customer, who makes very specific demands of them in this regard, largely determines their processing activities. Such findings are reflective of Jones' (1997) theory that many of the essential characteristics of Fordism have not been replaced by those seen as elements of a post-Fordist regime of accumulation. Instead, he suggests that many features of Fordism (largely typified by mass production) still exist, but are based upon specific and known market demands. These findings also demonstrate a close and somewhat manipulative relationship between **Company C** and their principal end customer (an MGR), but not the consumer and the food processor, as suggested in literature about the MSR of the 3rd Food Regime (see Ilbery and Bowler 1998).

Table 4.2 MSFPs' Food Processing Activities

MSFP	Type of Product Made at Site	Retail Brands / Product Uses	Retail Outlets
Company A	• Dried skimmed milk powder • Sweetened condensed milk • Sterilised cream • Cappuccino • Evaporated milk • Bulk quantities of cream	• Holding company named brand • Other food processors' named brands • MGR named brands • Also, used (internally) as ingredients for other sites and operations within the global holding company's operations	• MGRs • Independent grocers and convenience stores • Export • Interfactory commodity exchange
Company B	• Sweet biscuits • Savoury biscuits	• A range of holding company named brand • MGR named brands	• MGRs • Independent grocers and convenience stores • Export
Company C	• Chilled ready meals • Chilled meal items / foods • Frozen ready meals • Frozen meal items / foods	• Principal end customer named brand • Subsidiary divisions' named brands • Also, supply ready meals for a service provider with a substantial requirement for foodservice for its customers	• MGRs • Independent grocers and convenience stores • Export

To explore whether and how consumer demand influences their food processing activities, the MSFPs were asked how and why they develop new products. **Company A** explained that they develop new products by reproducing items that are made and marketed by its global holding company elsewhere in the world. For the other two cases, new product development appears to be essential. **Company B's** holding company undertakes extensive consumer market research to determine what kind of products are required in the largest possible end market outlets and their equipment at the Carlisle factory is adapted to allow small-scale production runs of new products. In addition, **Company C** stressed that growth of their business is dependent on new product development, which is informed largely by their principal end customer's demands.

In most cases though, the MSFPs did not carry out consumer demand research. Responsiveness to consumer demands is however said to be a key aspect of the MSR of post-Fordism (Fine 1995) and the MSR of the 3rd Food Regime (see Ilberry and Bowler 1998). In sum, these findings contrast with accounts of the MSR of the 3rd Food Regime (see Ilbery and Bowler 1998).

4.2.3 Ingredients' Supply Linkage Organisation and Regulation

The MSFPs were asked to describe the way in which their ingredients' supply linkages are organised and regulated. Table 4.3 summarises the key findings in this regard.

The three MSFPs generally use a number of different ingredients and **Company A** and **Company B** are more dependent on a smaller number and range of ingredients than **Company C. Company A** and **Company B** mass produce largely non-differentiated goods for mass markets to achieve economies of scale. They explained that they procure ingredients that meet their principal end customers' demands, demonstrating that it is the MGRs' demands that they seek to meet rather than food consumer demand. Existing accounts of the MSR of post-Fordism suggest however that consumer demand directly influences ingredients' procurement activity (for example, see Fine 1995; Ilbery and Bowler 1998; and, Warde 1997). Such findings therefore challenge existing theory in this regard.

Table 4.3 Type and Source of Ingredients Used and Mode of Procurement by MSFPs[38]

MSFP	Type of Ingredients Used	Source of Ingredients and Mode of Procurement
Company A	*Milk*	Written contracts with farmers located within a 50 mile radius of the processing site in North Cumbria.
	Sugar	Bulk purchasing by a division of their Head Office in the UK. Precise geographical location of primary source unknown.
Company B	*Flour*	Purchased in bulk as required from Carrs Milling Industries in Silloth North Cumbria from unknown primary producers.
	Fat Sugar dried milk, jam, nuts, flavourings, chocolate	Bulk purchasing by a division of their Head Office UK holding Company Bs a whole. Precise geographical location of primary source unknown / not specified.
Company C	*Beef, Milk, Potatoes*	Procured by head office using unwritten agreements with farms in Scotland, which are approved for use by their principal end customer.
	Fat	Procured using unwritten agreements with unspecified suppliers. Precise geographical location of primary source unknown / not specified.
	Flour, sugar, flavours, other Vegetables	Procured in mass quantities using unwritten agreements with suppliers. Precise geographical location of primary source unknown / not specified.

Interviews revealed that the nature of ingredients' supply linkage organisation and management also differed between the three MSFP cases largely as a result of the type of ingredients used. For example, until deregulation of the UK milk market in 1994,

[38] Principal ingredients, which are the focus of discussion in this section, are highlighted in italics in the text.

Company A was obliged to procure milk from the Milk Marketing Board (MMB)[39]. Post deregulation, **Company A** was concerned that the new milk marketing system in the UK (through Milk Marque) would not provide the same level / quality of service as the previous system had. They therefore designed and implemented their own milk procurement system, using farmers located within a fifty mile radius of the processing plant in Dalston.

The supply linkage between **Company A** and their farmer suppliers takes the form of written contracts with individual farmers, which are managed by a specialist team within **Company A**. The team maintains direct personal contact with each of their farmer suppliers and with **Company A's** head office in the UK. It provides advice and technical support to farmers, as and when required, to help them maintain contractual requirements. In collaboration with a committee comprised of farmers that supply to **Company A** in Carlisle, the milk supplies team is also responsible for making decisions about the way in which contracts are managed with suppliers. They meet regularly to contribute to decision making about milk supplies and the milk supplies' team stressed that this allows them to maintain a flexible approach to managing and controlling these supply linkages in a way that **Company A** considers keeps both them and the farmers happy. If **Company A** should wish to terminate their contract with a farmer, they must provide that farmer with three years notice. If a farmer would like to terminate the contract, they must provide **Company A** with three months notice.

In contrast with **Company A**, **Company B** procure their ingredients using unwritten agreements that generally last up to six months, or until the supplier fails to meet their demands. A central division of **Company B's** holding company is responsible for negotiating, establishing and maintaining supply linkages between them and their suppliers. This is done because it is the easiest way to manage procurement of bulk

[39]Indeed, prior to November 1994 all dairy farmers in the UK were legally required to sell all of their milk to the English and Scottish (depending upon their geographical location) 'Milk Marketing Boards'. In 1994 this statutory requirement was lifted as part of the 1993 Agriculture Act independent dairy companies could then procure milk directly from farms, as opposed to procuring milk from the Milk Marketing Board (MMB), who had procured the milk from the farmer. The MMB did not carry out any processing of the milk, it simply acted as a marketing board for the milk, managing the sale of milk to dairies and milk processors on behalf of the farmer.

supplies of ingredients that are used by the holding company's factories across the UK. It also enables **Company B** to be responsive to market demand in a cost efficient way. On a day-to-day basis however their ingredients' supply linkages are maintained by direct, face to face contact between technical staff at **Company B's** factories throughout the UK and the drivers that who deliver ingredients to their processing sites. The driver is informed of any problems with a delivery and then conveys this message back to the suppliers. Contact between **Company B** and their ingredients' suppliers is therefore remote and based on the principle that the supplier should get it right the first time.

Company C subsequently explained that, like **Company B**, they also operate rather flexible supply linkages:

...[i]*t is unusual for us to contract suppliers as we in turn have no contract with our customer.* [However] (f)*or bulk ingredients like . . . fats, we would contract up to 1 year ahead . . . We* [do however] *have traceability, therefore control, back to source of all our raw materials and we audit supplying factories world-wide...*

Like **Company A** and **Company B**, **Company C** also explained that if any supplier was persistently unable to provide the appropriate quality of ingredients demanded, the supply linkage with them would be terminated. **Company C** also explained that they prefer to procure ingredients on an *ad hoc* basis, as required, and when they are assured of their principal end customer's demand for the end product those items would be used to create. Such findings demonstrate once again that before they can make decisions which affect their activities on a day-to-day basis, **Company C** depend on feedback from their principal end customer.

Next, in terms of choosing suppliers, **Company A** and **Company B** explained that their UK head office specifies what ingredients they require, including the precise desired quality of product and the price to be paid for ingredients. In particular, **Company B** explained that the quality of ingredients had become a primary concern in their decision making about choice of ingredients' suppliers around 1990. Before that, the only real factor affecting their choice of suppliers was the cost of using them. A feature in the company's promotional literature in 1997 clarifies the precise importance of quality management for them:

Quality is all about consistently achieving a measurable standard and M^cVitie's high standards mean that every single product leaving our factories is: consistent – in size, shape, flavour and colour; safe; effectively packaged and correctly labelled . . . (T)*his quality assurance procedure is strictly followed from the supply of raw materials and packaging right through to the delivery of the finished product to the shops . . . Strict rules are also followed when it comes to storing raw materials. These cover hygiene, sealed containers, temperature control and handling...* (Company B Company Information 1997:11).

In terms of supply linkage management, **Company A** claimed that they strive to maintain close relationships with the farmers that supply them to ensure that they get the ingredients they require. **Company B** on the other hand explained that they require their ingredients' suppliers to package and label ingredients in a certain way to help them identify with specific ingredients, quickly and easily, to ensure that they can make produce to meet their end customers' demands. For example, some of their end customers specify the use of a smaller sized raisin than other end customers. It appears therefore that the quality of the ingredients used is not the only factor affecting **Company B's** choice of ingredient suppliers, and that what they ask of their suppliers can be rather demanding.

In addition, **Company C** explained that their supply linkages are developed in accordance with specifications made by their principal end customer who ultimately decides from where, and whom, all ingredients are procured. Before any supplier is chosen, a representative of **Company C** personally visits their premises to assess it against their principal end customer's demands, and a representative of their principal end customer usually attends these initial assessment visits. Once again, these findings demonstrate how **Company C** is greatly influenced by their principal end customer's demand and that their principal end customer takes a highly interventionist approach to supply linkage regulation in **Company C**.

Involving suppliers at early stages of new product development and how **Company A** and **Company B** manage their ingredients' supply linkages are characteristic of the post-Fordist, 'Just in Time', approach to supply chain management. This type of approach is seen to enable a company to respond quickly and appropriately to consumer demands (see Allinson 2004; Fine 1995; Saunders 1997; Steward 1996). Such objectives are key features of the MSR of the 3rd Food Regime.

4.2.4 Food Safety Management

As described in Chapter 2, food safety is a major source of concern and influence in the contemporary UK AFS (see Marsden *et al.* 2000). It was therefore considered important to investigate how and why the three MSFPs manage food safety in their own, and their ingredients suppliers' premises.

Company A explained that they carry out quality inspections of farmer suppliers' premises and maintain regular and frequent contact with them, via the telephone, fax and e-mail to ensure that their demands are being met. Their demands principally relate to:

- milk quality (farmers are paid a price which reflects the relative protein and fat content);
- animal welfare (farmers are issued with best practice guidelines); and,
- transportation of raw milk from the farm to the processing site (a local, specialist haulier has been chosen and trained to meet industry wide and their specific food safety demands).

In addition, before being used by **Company A**, the haulage company that they use had no experience of transporting fresh milk and so **Company A** provided them with guidance and training at their milk processing site in North Cumbria. Guidance and training was based on current legislation and industry food hygiene standards, to ensure that transportation is managed appropriately. Such actions by **Company A** are somewhat interventionist and have created a new management system for their suppliers, which they would not have needed if they had not been linked to **Company A**. **Company A** maintain however that this does not mean they control their suppliers' food safety management system. In-house at **Company A,** a computer controlled HACCP system is used to manage food safety, and they package their end products only in materials that are approved and specified by their end customers. Their head office designed the in-house food safety management system.

Company B and **Company C** maintained that food safety and hygiene management in-house and in their ingredients' suppliers' premises was highly prescriptive. Despite questioning about how and why this is the case, **Company B** was unwilling to say why they manage food safety in their own and their ingredient's suppliers premises as they do.

Company C, on the other hand, explained that they do this since they must meet their principal end customer's very specific demands in terms of:

- the required quality of ingredients;
- animal welfare management procedures;
- the way in which, and by whom, ingredients are transported from their suppliers to the processing plant; and,
- the type of packaging for the end product.

In-house, **Company C** have therefore been highly involved in developing food safety regulation procedures and have developed a training programme which all employees are enrolled in to meet their principal end customer's, and general food industry, food safety and hygiene demands. This training was designed and provided in-house since they felt that no local training providers offered appropriate courses. It was not a response to demands from their principal end customers. In addition, like **Company A**, they also provide guidance for the design of food safety management systems in their suppliers' premises, but they are not involved in their implementation.

Considering the above, it appears that each of the three MSFPs has been able to make their own decisions about how to manage food safety in their own premises and those of their ingredients' suppliers in order to achieve their end customers' and general food industry safety demands. It is also evident that, largely because there are no such courses available locally, the MSFPs have invested in the development and provision of their own food safety and hygiene training courses. These particular aspects of food safety regulation have been only marginally explored in the literature to date (see Howells *et al.* 1990; Peck *et al.* 2000).

4.3 The Relationships between the MSFPs and North Cumbria

The concept of embeddedness, or reliance on specific resources from, or aspects of, a particular location has been used to the success of industrial districts historically and agro-food and craft based industrial networks in the 'Third Italy' (see Amin 1994; Arfinni 1999; Cooke and Morgan 1992; Brusco 1982; Fanfanni 1994; Grandori and Soda 1995; Storper 1995; Sunley 1992). Case study findings revealed that the MSFPs' decisions to locate in North Cumbria were based on the access it provided to local, natural or manufactured

resources that are required for the processing of raw materials into finished products and for the marketing of those finished products. For example:

- **Company A** located in Dalston to ensure close proximity and ease of access to their principal ingredients' suppliers: dairy farms within a 50 mile radius of the factory. It was also essential for them to be close to a river that provides water, which is used to cool milk after it has been processed.
- **Company B** located in Carlisle to be close to a canal which provided water that they use in their processing activities and have found that they cannot produce the 'Carrs Water Biscuit' to the same quality and taste in any other location than in Carlisle. This is a significant issue since that is one of their most profitable product lines that they 'inherited' when they bought the company that was originally housed at this site in Carlisle. They explained that, due to its prominence in their product portfolio, this issue alone has helped prevent their possible relocation.
- **Company C** was established in Carlisle since this was the home of the founder members of the company. They have remained in, and significantly expanded, their current site and location (within approximately 1 mile of the M6) to ensure access to a major road network that enables them to distribute their finished produce with ease. They are also dependent on their workforce, which they have trained in-house to meet their requirements. They explained that moving to another location would mean that they would have to invest in training their workforce and that this would be a considerable cost to them.

Such findings reveal a variety of reasons for MSFPs' location in North Cumbria. Interestingly, none of them located there solely to be close to the source of their primary ingredients (although this is one factor affecting **Company A's** decision to locate here). In view of this, the three MSFPs' use of North Cumbrian agro-food resources and / or services in particular was also explored further. Findings revealed that **Company A** uses local dairy farmers as suppliers of their principal ingredient and a local specialist haulage firm is used to transport milk from those farms to the processing plant. In contrast, **Company B** and **Company C** do not use local agro-food suppliers. But, somewhat like **Company A**, they have provided knowledge and information to local food processors and have previously collaborated with Carlisle City Council to provide training and trade development initiatives in the North Cumbrian AFS. Such initiatives aimed to promote and strengthen the local food economy and include, for example, 'The Carlisle Food Forum' (see Chapter 3). The use of locally available agro-food resources and services by these very successful MSFPs is however very limited. Such findings challenge Fine's (1995) notion that resources and relationships within the local AFS are vital components of sustainable contemporary AFS development.

The relationship between food and its place of production or processing is currently a popular concept in agro-food literature and policy, with much of the work in these fields focusing on the use of regional and place name branding to improve food companies' marketing opportunities (see Weatherall *et al.* 2003). In view of this, the three MSFPs were asked about their use of regional place names in the branding of their finished produce. **Company A** and **Company B** do not currently use the name, or include images, of the location of their factory in any of their finished products' brand names or packaging. Instead, they use their own, or their end customers' (MGRs') own brand names and packaging materials or graphics that are approved by them and / or their end customers. In marginal contrast, **Company C**, produce a meal item for their principal end customer, which is marketed under the name 'Cumberland Pie'. This is an entirely new product that was developed by them to create a sense of 'traditional wholesomeness' for the product. It is one of their most successful products, and has been available for a number of years (prior to the mid 1990s). Such a finding suggests that there is persistent demand for such types of product in the UK, which is not related to recent food scares and animal disease crises. Findings thus suggest that associating product names with places that consumers perceive to be traditional and wholesome has been helpful for **Company C,** who developed a new product to be marketed primarily within the UK through a high value and high profile food retail outlet.

4.3.1 Use of Local Farmers as Ingredients' Suppliers

Still in relation to the concept of the use and dependence on locally available resources for success in the UK AFS at the present time, the MSFPs were asked for their perceptions and opinions of using local farmers as suppliers. **Company A's** current dependence on a high number of dairy farmers located within a fifty mile radius of their processing site suggests that they have a preference for this type of supply linkage since it provides them with the perishable ingredient they require. **Company B** and **Company C** do not use local farmers as suppliers of ingredients though. **Company C** explained that this is because they feel that local farmers would not be able to provide them with enough of the ingredients that their principal end customer requires them to use. Despite that, **Company C** explained that if they could choose their own suppliers, they would use local farmers wherever possible to

help support the development of the local food economy. It appears therefore that their end customers' demands restrict their ability to act as they would like to.

From the above, it is clear that each MSFP makes a number of highly specific demands of their ingredients' suppliers and that those demands are largely based on their end customers' requirements. Control over ingredients supply linkages is therefore a fundamental factor in the continuity of MSFPs' linkages with their end customers. Each MSFP defined control over their ingredients' supply linkages as being confident that they can procure the appropriate quality and type of produce to be processed for their end customers. **Company A** explained that they use a specialist in-house team to do this and **Company B** use *ad hoc* telephone contact with their ingredients' suppliers. Slightly more intrusively, **Company C** designed and implemented a traceability system for use by their beef suppliers and their principal end customer also personally investigates each of their suppliers' premises. In addition, unlike **Company A**, both **Company B** and **Company C** each stated that the physical distance between them and their ingredients' suppliers was not a factor that affected their ability to control their ingredients' supply linkage management. Such findings add further reason to reject the notion that the success of MSFPs in the contemporary UK AFS is dependent on the use of locally procured ingredients and other resources.

4.4 Hypothetical Agro-food Information and Product Exchange / Supply Networks in North Cumbria

This section relates to literature that considers the regional organisation and regulation of supply and production linkages to be an effective way of co-ordinating and regulating contemporary industrial production relations (see Cooke and Morgan 1992; Fine 1995; Gertler 1992; Saraceno 1994; Storper 1995). With regard to agro-food production, such an approach has recently been seen as a way to provide farmers and smaller food processors with more opportunities to market their produce for better returns (Policy Commission 2002). It has also been proposed as a model of agro-food supply linkage organisation that is responsive to contemporary dynamic and highly differentiated consumer demand (see Atkins and Bowler 2001; Ilbery and Bowler 1998). Elsewhere in the world, the local agro-food network model is a traditional way of organising specialty and craft based food production in, for example, areas of the 'Third Italy' (see Arfini 1999; Brasili *et al.* 1997;

Brusco 1982; Fanfanni 1994; Gonano 1997). It has also been used as the basis for more contemporary models of agro-food supply and production organisation in the Netherlands (for example, see Folkerts and Koehurst 1998). Taking this into account, this section offers insights into its potential viability in the UK by describing the MSFP case studies' response to questions about the viability and management of, as well as their potential use of, such a hypothetical network between farmers and food processors in North Cumbria[40].

4.4.1 Regional Agro-Food Product Supply Networks

Company A explained that they would happily use more North Cumbrian farmers as suppliers if they had sufficient demand for their end products to warrant the use of more inputs. They also explained that they would not want to use a supply network that they did not have direct control over, since this would not meet their ingredient supply linkage demands. They would therefore prefer to maintain direct linkages with individual farmers as they do at present, rather than engage with a supply network. **Company B** was also not in favour of such a hypothetical network. Additional questioning provided no details as to why this was the case though. Finally, **Company C** explained that they would happily use such a network if they could be assured that the quality of available ingredients met their principal end customer's specifications in that regard.

Control over the quality of their ingredients thus appears to be a key influencing factor over the structure and nature of two of the three MSFPs' modes of ingredients' supply linkage organisation and regulation. This is entirely in line with accounts of the MSR of the contemporary UK AFS, during what has been referred to as a 3rd Food Regime (for example, see Atkins and Bowler 2001; Ilbery and Bowler 1998).

[40] In advance of the remainder of this section, the reader should note that since the interviews were conducted, this model of supply linkage organisation in the UK AFS has gained some prominence in food and rural development policy making and implementation. This section of the chapter does not therefore aim to provide a feasibility study to AFS policy makers in North Cumbria, nor does it seek to assess whether such a policy should be implemented in North Cumbria since the fieldwork was undertaken when that was simply not under consideration. Instead, as explained in section 4.1, this work seeks to lend deeper understandings to the debate about whether and how such a model of AFS supply linkage organisation would be possible in the UK at the present time with specific reference to a case study of the North Cumbrian AFS.

4.4.2 Regional Agro-Food Information Exchange Networks

MSFPs were subsequently asked whether they would be happy to use / participate in a hypothetical agro-food information exchange network between farmers and food processors in North Cumbria, as a means to encourage more communication between them, and to satisfy consumer demands.

None of the MSFPs was supportive of the concept of such a network. Reflection on findings in relation to their current organisation and management of ingredients' supply linkages might help understand why this is so. For example, each of the MSFPs stated that they prefer to have direct contact and information exchanges with their ingredients' suppliers. In the case of **Company C** such relationships also revolved around input from their principal end customers.

The sample was also asked whether they would be prepared to act as mentors in such an agro-food information exchange network between farmers and food processors in North Cumbria. **Company A** stated most strongly that they would not be happy to act as a mentor for other food processors or farmers that were not directly involved in supply linkages with them, and that they would prefer to maintain personal, direct contact solely with their own suppliers. **Company B** explained that they would also be unwilling to accept such a role, but offered no explanation as to why. In contrast, **Company C** said that if such a network was established they might be inclined to contribute information to it. They asserted however that if they were to do that, it would need to be non time-consuming so as not to detract them from their relationships with their principal end customers and suppliers.

Direct information exchange between MSFPs and their suppliers appears therefore to be a significant feature of their day-to-day existence, and in the case of **Company C,** their principal end customer was very much a central element of their information exchanges. Such findings contribute a deeper understanding of the MSR for these MSFPs. They have a strong dependence on direction of their activities by their end customers (MGRs), which is not reported in existing agro-food regime literature that refers to the existence of a 3rd Food Regime.

4.4.3 The Role of Government and Development Agencies in Regional Agro-Food Networks

The sample was subsequently asked about their perceptions of the potential role(s) for Government and development agencies in a hypothetical agro-food product supply or information exchange network between farmers and food processors in North Cumbria. This question was asked to explore how much these MSFPs would welcome the involvement of parties not directly involved in the transaction between them and their suppliers in such a hypothetical supply network. This was considered important in view of the market-oriented approach to UK AFS organisation and regulation that has been promoted via agro-food policy since the 1980s.

Unfortunately, despite numerous attempts to have them do so, **Company A** and **Company B** were ultimately unwilling to answer this question. In contrast, **Company C** explained that they felt it would be appropriate for the Local Authority and development agencies to promote, and raise the profile of, food processors' demands with local farmers. They felt that this would make farmers aware of what they need to do to become a supplier to them and suggested it would be possible to do this through an information exchange network. They also explained that, wherever possible, they would prefer it if food processors (not local government or development agencies) were allowed to organise and direct such a network. Finally, **Company C** also suggested that such a model would allow food processors to have considerable influence over local farmers' activities, and that this would benefit the development of the regional food economy generally and in line with the wider AFS. In addition, and, in their opinion, more importantly, they suggested that such a model would help develop farmers' understandings of their own and consumers' demands.

These findings reflect an acceptance of, and preference for, market oriented approaches to AFS organisation, regulation and development based upon individual and independent linkages between MSFPs, their suppliers, and their end customers. They challenge the perception that more horizontal collaboration in the AFS might be appropriate and possible, certainly from **Company C's** perspective and, given their unwillingness to respond, possibly from the perspectives of **Company A** and **Company B**.

4.4.4 The Management of a Regional Agro-Food Supply Network

The MSFP case studies were next asked to say how such a hypothetical network could be managed so as to benefit all farmers and food processors, not simply the larger ones. This question was asked in order to first of all identify whether the MSFPs considered this to be an issue worthy of consideration, and secondly to establish, if they did not, why they felt it appropriate not to protect smaller farmers and food processors against their larger counterparts.

Company A and **Company B** declined to respond to this question. In contrast, **Company C** asserted that they considered it appropriate for larger food processors (such as themselves) to manage such a network so as not to disadvantage smaller food processors and farmers participating in it. They also felt that it would be wrong to think that all large food processors wanted to subsume smaller food processors. Rather, they explained, some larger food processors might prefer to sub-contract the services of smaller food processors for particular lines of products as required to meet end customer demands on an *ad hoc* basis. Such a finding suggests that direct and independent, *ad hoc,* linkages between MSFPs and their suppliers are preferred over more collaborative linkages. This adds further reason to consider that collaborative and horizontal networking based approaches to agro-food supply and production may not be viable in the contemporary UK AFS, at least from the perspective of this MSFP.

In addition, **Company C** also suggested that a local farmers' co-operative or collaborative marketing group would help protect all farmers from the, sometimes excessive and unrealistic, demands of large food processors and MGRs. Such a statement is intriguing since it suggests acceptance of the argument that farmers are subjected to unfair trading practices and negotiations by MGRs, which is at the heart of contemporary debates about the need for a more inclusive UK AFS. It also suggests that the farming sector should act independently and concentrate on marketing their produce in commodity form as opposed to entering into processing activities. Furthermore, it also suggests that this MSFP would not be willing or able to help local farmers who suffer from potentially unfair dealing with MGRs and that it is unrealistic to think that, from their perspective, there is potential for regional vertical collaboration between farmers and MSFPs.

4.5 Summary

This section considers the key findings discussed in this chapter in relation to the study's objectives.

To summarise, the chapter had three aims, each of which related to the research objectives.

- First of all, the chapter aimed to establish how and why these MSFPs were established in a remote rural area and have developed throughout the 2nd and 3rd Food Regimes. This was done in section 4.2.
- Secondly, the chapter sought to develop an understanding of whether, how and why the MSFPs relate to, and use resources from within, the region in which they are located. This was done in section 4.3.
- Finally, the chapter sought to determine the MSFP sample's perceptions and opinions of the notion of a hypothetical regional agro-food produce and information supply network. Section 4.4 describes the sample's response to these questions with specific regard to their relative willingness to be involved in, or to use, such a network. It also describes their opinions of the most appropriate way to manage such a hypothetical product and / or supply network between farmers and food processors in North Cumbria.

The chapter therefore contributes to the achievement of the study's research objectives and the remainder of this section summarises how.

First of all, it appears that these MSFPs' supply linkages are organised and regulated in ways that are reminiscent of the MSRs of Fordism and the 2nd Food Regime, and post-Fordist and the 3rd Food Regime. Each enterprise had a centralised decision making system and operated at a large scale and on a global scale. By maintaining direct contact between the processing site and their ingredients' suppliers however, they operated in flexible ways to meet their end customers' demands.

Secondly, with regard to the relationship between these MSFPs and the region they are located in, it is interesting to note that each of the case study MSFPs had been established in North Cumbria for a number of years and was happy to remain there. An explanation for this is that their locations provide them with access to key resources (for example, easy access to major road networks and natural resources that are used to support processing activities), not solely agro-food produce, that enable them to continue and develop their processing activities in this location. Within the sample, it was somewhat extraordinary

that **Company A** used local farmers as suppliers of their principal primary ingredient since the other two MSFPs did not at present and also felt that they could not in the future.

Third, the notion of a hypothetical regional agro-food information and produce supply network between farmers and food processors was not well supported by the MSFPs. Indeed, they expressed substantial preference for close and direct relationships with individual suppliers as opposed to a more collective and collaborative approach to procuring their ingredients.

Finally, the MSFP case studies demonstrated that the organisation and regulation of their supply linkages is primarily affected by their end customers' and their own demands. Only **Company B** claimed that food consumers' demands are primarily and specifically taken into account as a key influence on ingredients' procurement activities. This challenges current accounts of the MSR of the 3rd Food Regime. It was also clear that the need to manage food safety also impacted upon the extent to which they influenced their suppliers' in-house activities. The role of food safety in contemporary agro-food supply linkage organisation and regulation receives little attention in the existing literature (see Chapter 2).

This section has summarised how this chapter relates to the research objectives. The chapter as a whole contains a number of key findings in relation to details in the conceptual framework. These key findings are synthesised in Chapter 7 alongside those from SME food processors' and farmers' case studies (as presented in Chapters 5 and 6 respectively).

Chapter 5

A Case Study of SME Food Processors in North Cumbria

5.1 Introduction

This chapter considers the findings from in-depth interviews conducted with nine SME food processors in North Cumbria (Companies D – L). To address the research objectives (see Chapter 3, section 3.2), it uses the case study findings to extend understandings of:

- How and why the SME food processors came to be established and developed in North Cumbria under advanced capitalism and critically assess whether this occurred as described in the Food Regimes literature.
- The relationship between the SME food processors and the region in which they are located in terms of their use of resources available there.
- The case study SME food processors' perceptions of the viability of a hypothetical regional agro-food produce and information supply network.

The reasons for, and ways by which, SME food processors come to be established, and have developed, under advanced capitalism is referenced infrequently in the literature relating to the political economy of the AFS, agri-business management and agricultural economics. As highlighted in Chapter 4, that literature tends to focus on the way in which multi-national food processors have generally evolved under advanced capitalism. It only very briefly explains that in the mid 1980s SME food processors were often acquired by larger food processors or merged with other SME food processors (see Fernie 1990; Hall and Sweeney 1986; Howe 1983; Welsh 1997). Emergent theory about the MSR of the 3rd Food Regime suggests that SME food processors are key actors in the UK AFS at the present time though (see Ilbery 1998). Acknowledging the potential differences in the development experiences of different SME food processors will however provide an understanding of to what extent the recorded characteristics of the 2nd and 3rd Food Regimes, and the MSRs of Fordism and post-Fordism (see Chapter 2) accurately reflect actual SME food processor experiences. This enables a critique of the extent to which it may be appropriate to understand and conceptualise supply linkage organisation and

regulation in terms of the concepts of regimes of accumulation and Food Regimes in particular. That critique is developed in section 5.2.

Secondly, as noted in Chapter 4, agricultural geography literature largely appears to accept that the composition and type of agricultural geography in a region determines the nature, type and extent of AFS activity therein (see Chapter 2). This suggests that it is reasonable to assume that the nature and type of AFS activity in a particular location is restricted by the availability of food that is produced in that location. However, the availability of a range and variety of services (for example, road networks and ICT) to support AFS business continuity and development under advanced capitalism in a global economy could challenge that assumption. Indeed, this sample of SME food processors exists in a remote rural area where the nature and type of agricultural production activity does not necessarily, or directly, relate to their food processing activities. Description in this chapter of whether, how, why, and to what extent the case study SME food processors use resources available within the region in which they are located, to assist their business continuity and development, enables theorisation about the possible contemporary role of the region in the AFS. That theory is developed in section 5.3.

Finally, as mentioned in Chapters 2 and 4, the hypothetical concept of regionalised AFS supply networks and linkages are gaining support in the UK AFS. What is more, regionalised industrial supply networks have been seen to bring about economic development in the UK in the relatively recent past (Cooke and Morgan 1992; Gertler 1992; Saraceno 1994; Storper 1995). Existing literature does not critically evaluate what potential there is to include SME food processors in such activity. Describing the SME food processor sample's perceptions of the viability of that hypothetical model enables theorisation of how appropriate it could be to use the regionalised supply network model in the AFS, and that theory is developed in section 5.4.

5.2 SME Food Processor Company Establishment and Development

This section describes how the SME food processor case studies came to exist in North Cumbria, what they do in the UK AFS, their relative positions in the food processing sector, and what food markets they are active in.

5.2.1 SME Establishment in North Cumbria

Table 5.1 summarises the composition of the SME food processor sample. Briefly however, **Company G** and **Company E** were established in Cumbria, between the late 1800s and the 1920s, during the period of time that has been conceptualised as the 1st Food Regime (see Ilbery and Bowler 1998). **Company G** was originally, and has remained, a family business in Penrith, which located there to be close to a major road network, and to their end customers (the local population that shops in their retail outlets in Cumbria). **Company E** is the only SME food processor in the sample to have started trading as a small family business that subsequently moved to and expanded on an industrial estate in Carlisle in 1957.

Two SME food processors, both bakers, were established in Cumbria between the 1920s and the 1980s, during the period of time that has been conceptualised as the 2nd Food Regime (see Chapter 2). **Company D** was established as a family business near Penrith in 1946, by the father of the current managing director. He had baking skills and felt that the location offered easy access to a large potential end market for their produce. The business continues to operate from their original location and has recently expanded and undergone centralisation of all production activities at one site to ease in-house management. **Company F** was established towards the end of the period of time that has been conceptualised as the 2nd Food Regime (see Chapter 2), to allow the owner to use his baking skills and develop a business that suited his lifestyle. Accounts of the MSR of the 2nd and 3rd Food Regimes do not currently identify with such motives however (for example, see Atkins and Bowler 2001; Friedmann 1982; Friedmann and McMichael 1989; and, Ilbery and Bowler 1998).

The remainder of the study's SME sample was established between 1979 and 1991. These food processors began trading in or near to their homes and, like the other SME food processors, started out as family businesses (**Companies H - L**). Two of these food processors have subsequently moved to different sites, in rural locations in North Cumbria, to expand the scale of their premises and the range of their income earning activities.

Table 5.1 SME Food Processor Sample Profile

SME Food Processor	Nature of Involvement in AFS	Date established in North Cumbria	No. of employees	Location
Company D	Baker (bread, morning and other baked goods) and retailer	1946	231	Lazonby, near Penrith
Company E	Baker (bread, morning and other baked goods)	1922	140	Carlisle
Company F	Baker (bread, morning and other baked goods) and retailer	1976	70	Melmerby, near Penrith
Company G	Meat processor and retailer	1941	100	Penrith
Company H	Game and poultry meat processor and retailer	1989	8	Penrith
Company I	Trout processor and trout producer and retailer	1985	4	Tirril, near Penrith
Company J	Condiment producer and retailer	1987	2	Alston, near Penrith
Company K	Dairy processor and micro scale milk producer and retailer	1979	6	Thursby, near Carlisle
Company L	Fine chocolate producer and retailer	1991	4	Orton, near Penrith

In terms of ownership, management, and control, eight of the nine SME food processors were family businesses in which there was no separation of ownership from control. In contrast though, a large milling company in North Cumbria owns **Company E** and, since 1994, it has leased **Company E** to a major UK based bakery group. The lease provides the bakery group with exclusive occupation rights to the site and equipment contained within it. This finding demonstrates how an SME food processor in North Cumbria, a relatively remote and predominantly rural region of the UK, has been subsumed within and controlled by a successful MSFP.

With regard to the scale of their premises, each of the SME food processors operated from only one site. Until the BSE crisis of 1996, **Company G** had operated two processing sites

(one in Carlisle and one in Penrith). The food safety regulations introduced post BSE in 1996 increased the cost of managing their enterprise, and led them to downscale and consolidate their operations at one site in Penrith.

With regard to the issue of ownership and take-over, **Company L** was ambivalent about being taken over by a larger company and **Company F** was not absolutely against the prospect. In addition, **Company E** stated that they prefer to be owned and controlled by a larger MSFP than being a small, independent company. In contrast, during the interviews with this sample, the remaining SME food processors said they would prefer to remain independently owned and managed for the following reasons:

- A desire to meet the demands of all investors in the company and more shareholders would make the task very difficult (**Company D**).
- A preference to expand or change the direction in which the business develops themselves (**Company J** and **Company G**), for example by opening a franchise in an MGR where they would market their produce (**Company G**).
- Concern that subsumption of their enterprise would be likely to reduce the quality of their product and they are unwilling to compromise in this regard (**Company K**).
- Concern that the business occupies a relatively small share of a niche market, which would not be an attractive proposition for larger food processors (**Company H**).
- Concern that the business operates from the same location as the family home and a fear that subsumption may mean they lose their home (**Company I**).

These SME food processors, in remote rural locations, with very few employees, and largely based within the family home and / or dependent on family members as their labour resource, thus generally appear to want to retain full ownership and control of their business in the long term. Findings also illustrate that it would be wrong to assume that all SME food processors would prefer to remain as they are, and that they do not seek to expand or sell their business. They also challenge accounts in the literature that perceive the subsumption of SME food processors by MSFPs to be inherently damaging to their existence (for example, see Ray 1994; Zwart and Fearne 1994). Furthermore, the findings suggest that even when under financial pressure (like **Company G**), these SME food processors want to retain their independence and make internal organisational changes to permit that. Such a flexible approach to business management is considered to be an asset for small food companies that are highly dependent on local resources and inputs (see Brusco 1982).

In terms of human resource use, all SMEs used entirely full time, or a combination of full and part time, workers (a variety of family and non-family). None of them used only part time employees. With regard to the relative intensity of labour / human resource use by SME food processors, eight of the nine cases are controlled by their owners who make all decisions regarding the day to day running of the enterprise, and particularly in relation to food safety. For example, the respective owners of **Company L**, **Company K** and **Company I** are involved in most aspects of their companies' respective food processing activities because they consider they have the most specific knowledge of how to co-ordinate their activities. Each of these food processors is owned / managed by a partnership of fewer than four people in total with each of those people being assigned specific tasks / duties within the enterprise.

Such findings reveal an intensive use of full time labour for the day to day running of these SME food processors. As such, it is clear that these enterprises think about meeting their end market's demands in a business-like way. The findings also demonstrate that people, their skills, and expertise are crucial assets for these SME food processors. Such issues are not addressed in the existing political economy of the AFS literature. In addition, literature that refers to the existence of the 3rd Food Regime (see Chapter 2), which considers that SME food processors play an important role in the contemporary UK AFS, also does not consider this issue.

In contrast with most of the cases, **Company F** has appointed individual divisional managers who help them to identify what action needs to be taken to improve areas of the business, but the managing director always makes the final decisions. **Company D** has also created specific managerial posts that focus on food safety management in particular. These positions have been created to ensure that the business meets legal requirements, consumer demands, and their own internal demands to produce the highest quality, and most potentially marketable produce possible. Since the interviews were completed, it is noteworthy that these two SME food processors have merged some of their operations to enable them both to expand and develop the highest value products while retaining individual bases in distinctly rural locations, and individual business identities. This merger demonstrates how an alliance between two individual SME food processors was

possible, allowing them both to retain their individual identities, without one being subsumed by another. Agri-business management literature on the subject of UK AFS acquisition and merger activity does not consider the potential for SME food processors to collaborate or ally themselves to one another in this way to help develop their businesses. These findings therefore challenge existing knowledge or understanding in this regard, and reflect some of the themes highlighted in the literature relating to agro-food networks in the 3rd Italy for example (see Arfinni 1999; Brusco 1982; Fanfanni 1994).

5.2.2 Supply Linkages and Processing Activities

Table 5.1 summarises the type of food processing activities that the SME food processor sample is involved in. This section describes how and why their ingredients' supply linkages are managed as they are. Details of their food processing activities are also provided to illustrate the number and variety of different types of end market in which their finished products are sold. This allows demonstration of whether these SME food processors are active in niche food markets as literature about the MSR of the 3rd Food Regime suggests is the norm for SME food processors in the contemporary UK AFS (see Atkins and Bowler 2001; Ilbery and Bowler 1998).

Interviews revealed that wholesale outlets outside of North Cumbria, elsewhere in Cumbria, the UK and in some instances Europe, are the most frequently used sources of ingredients for the case study SME food processors. Five of the SME food processors also procure some of their primary ingredients directly from farms (**Company G, Company K, Company I, Company L** and **Company F)** with three of those SME food processors using their own smallholding or farm for ingredients' supplies (**Company G, Company K** and **Company F).** Of those five, only **Company I** uses a farmer located outside of Cumbria as a supplier.

Findings also revealed that none of the SME food processors use only farmers as suppliers of ingredients, and that all SME food processors use either primary food processors outside of Cumbria, or wholesalers in Cumbria as ingredients' suppliers. A number of the SME food processors explained that they use Cumbrian farmers and suppliers as much as possible and would use them more often if there was a higher number of farmers in Cumbria that produce the ingredients they require. These SME food processors, in a

relatively remote rural area of the UK are therefore capable of independently integrating with the mainstream AFS of the UK and even the EU. Such activity has not yet been considered in the literature on the political economy of the AFS. Rather, this literature has previously tended to concentrate on how SME food processors have conventionally been unable to compete with, and alongside, MSFPs in the UK AFS. These findings highlight that SME food processors can influence their suppliers regardless of their location, to the same extent, and for the same reasons, as MSFPs.

Precisely what factors influence the SME food processors' choice of ingredient supplier was also explored (see Table 5.2 for a summary of the findings). Almost every SME food processor gave a different combination of influences, but each cited the quality of ingredients available as a principal factor affecting their choice of supplier. Six SME food processors also considered the variety and type of ingredient available to be a key factor affecting their choice of supplier. In addition to this, the service available from suppliers was also seen as another key factor in the choice of ingredients' supplier. Furthermore, **Company J** explained that their need for small quantities of ingredients affected their choice of supplier, making it so that only those willing and able to supply small amounts of required ingredients could be used.

In order to ensure that they get the ingredients they require, most SME food processors take an informal approach to contacting suppliers and maintaining supply linkages with suppliers, and the sample revealed a variety of ways in which they do this. For example, six of the SME food processors (**Company H, Company J, Company E, Company K, Company I,** and **Company F**) asserted that they generally approach potential new suppliers themselves. In addition to this, **Company G** explained that potential suppliers approach them, and **Company D** explained that they welcome being approached by potential suppliers, but this is not their sole means of securing suppliers of ingredients. Personal contact with suppliers and a two-way relationship that is managed by the SME food processor with their ingredients suppliers appeared to prevail across the sample. Such a finding supports the notion alluded to above, that SME food processors are able to organise and regulate their ingredients' suppliers' activities just as well as the MSFPs appear to be able to (see Chapter 4). Such an approach to supply linkage management is central to the 3rd Italy agro-food network model (see Brusco 1992).

On a day-to-day basis, there was however some differences in the way that these SME food processors managed their ingredients' supply linkages. For example, five of the SME food processors use informal, longstanding supply agreements between them and their suppliers, which are based on one-to-one relationships. In contrast, **Company L** and **Company E** use formal, more adversarial and 'arm's length' procurement arrangements, to secure the correct type and quantity of ingredients. What is more, **Company K** use a legally binding, written, milk procurement contract with Milk Marque since it enables them to specify the procurement of milk from one particular local farm, and have the procurement process managed on their behalf by Milk Marque. Existing literature about the MSR of the 3rd Food Regime does not however mention such a variety of forms of supply linkage organisation and regulation amongst SME food processors and between them and their ingredients' suppliers.

In sum, the findings presented in this section thus far demonstrate that SME food processors are able to make specific requests for, and procure even small amounts of, specific ingredients of a particular quality, variety, and type. Furthermore, once established, the majority of the SME food processors maintain their supply linkages through informal, one-to-one, relationships with their suppliers. Principal reasons for maintaining close and direct, ongoing, contact with their suppliers, largely via the telephone, fax and e-mail, included:

- to improve cost effectiveness (**Company D** and **Company E**);
- to ease management of supply linkages (**Company K** and **Company I**);
- to maintain full traceability of ingredients (**Company K** and **Company I**);
- to make sure that they can take delivery of precisely what they require in terms of quality, type and variety (**Company F**); and,
- to ensure that they continue to receive the highest quality ingredients from those suppliers (**Company G**);

From time to time, supply linkages fail however. **Company L** and **Company F** explained that failure to provide particular types of produce was the most common cause of supply linkage termination for them. Intriguingly, there was very little mention of cost or quantity as factors that lead to termination or reassessment of supply linkages by SME food processors. Only **Company E** cited cost, and **Company J** cited the inability to provide a

small quantity of ingredients, as a factor that had made them terminate ingredients' supply linkages in the past. The findings that highlight the importance of quality, variety and type of ingredient to supply linkage correspond strongly with accounts of the respective MSRs of both the 3rd Food Regime (see Atkins and Bowler 2001; Ilbery and Bowler 1998; Lavelle 1996; Patchell 1993) and post-Fordism (see Axelsson and Easton 1992; Bonnaccorsi and Lipparinni 1994; Conti 1993; Fine 1995; Saunders 1997; Scott 1988; Steward 1996).

The findings reported here reveal much more than existing literature on the subject of the political economy of the UK AFS does in terms of SME food processors' motivations and activities. They suggest, for example, that SME food processors in the UK are enterprise oriented and are able to act ruthlessly in similar ways, and for similar reason, to the MSFPs (see Chapter 4). Based on case study SME food processor evidence, also appear to have the same potential to exert similar types of influence over their suppliers as MSFPs.

Table 5.2 Factors Affecting Choice of Ingredients' Suppliers

SME Food Processor	Factors Affecting Choice of Ingredients' Suppliers							
	QUALITY	TYPE	VARIETY	TRACEABILITY	COST EFFECTIVENESS	SERVICE PROVIDED	TRADITION AND INFORMAL PERSONAL CONTACT WITH SUPPLIERS	QUANTITY AVAILABLE
Company D	✓	✓	✓	×	✓	✓	✓	×
Company E	✓	×	×	×	✓	×	×	✓
Company F	✓	✓	✓	✓	×	×	×	✓
Company G	✓	✓	✓	✓	✓	✓	✓	×
Company H	✓	✓	✓	×	×	×	×	×
Company I	✓	×	×	✓	×	×	×	×
Company J	✓	×	×	×	×	✓	×	✓
Company K	✓	✓	✓	✓	×	×	×	×
Company L	✓	✓	✓	✓	×	×	×	×

5.2.3 Food Safety Management

Literature suggests that SMEs can find it onerous to manage food safety (for example, see Peck *et al.* 2000), and that it can be a barrier to the development and existence of SMEs in the contemporary AFS (see Howells *et al.* 1990). This section illustrates the case study SME food processors' experiences of food safety management. It also details whether or not, and to what extent, the SME food processors' actions in this respect were influenced and / or directed by their end customers or other external parties. This is done to demonstrate whether, how, and to what extent SME food processors are able to influence their own, independent food safety management activities.

Company D and **Company E** were the only case study SME food processors to have implemented food safety management programmes in-house. **Company D's** in-house HACCP system regulates all equipment, processes and ingredients that are used in their processing activities. The managing director explained:

...(E)*verything is documented within the production chain, from the de-boxing of the raw ingredients to the production, weighing and packaging of the end products. The HACCP system is observed throughout* [all of the food processing activities in-house]...

Company E also operates a HACCP system as well as other food safety management systems specified by their end customers (MGRs), each of which uses a different system. **Company E** must use each of these if they are to continue to supply to these MGRs. Their MGR end customers are therefore able to directly influence and specify their food safety management activities.

In terms of the issue of food safety regulation in the meat and livestock sectors of the UK AFS, **Company G** was vociferous on the subject and exclaimed that there is, "*a plethora of regulations...*". This has dramatically increased the cost and complexity of meat processing management for them, resulting in the closure of one of their two processing sites. They also stated that they have always maintained tight control over hygiene and food safety as a matter of good commercial practice, and that it is only now, after numerous food safety crises in the UK, that people want explicit assurance of that. This means that they must adhere to onerous regulations, which, they feel, have increased in volume since the BSE crisis in March 1996. The relationship between food safety scares in

the UK and burgeoning food safety regulations is an issue that has already been identified and theorised in the literature (for example, see Marsden *et al.* 2000).

The majority of the remainder of the sample of SME food processors explained that to manage food safety and hygiene on their premises they follow:

- FSA 1990 guidelines;
- industry guidelines regarding the storage of particular types of ingredients; and,
- their own food safety and quality demands.

Figure 5.1 illustrates how some of the SME food processors do this specifically through the use of complex approaches to managing food safety, which are similar to the flexible approaches to supply chain management that the literature suggests exist under post-Fordism (see Chapter 2). It also appears that these approaches and techniques enable them to produce food that is safe for human consumption, without a need for them to be affiliated with specific food industry hygiene, quality and safety regulation schemes, procedures, and systems. Indeed, only two of the SME food processor case studies ask their suppliers adhere to particular food safety assurance and certification schemes. For example, **Company G** only procured red meat from farmers that were registered with FABBL (Farm Assured British Beef and Lamb), a nationally recognised livestock quality assurance system. They explained that they do this because it ensures that their produce is regarded as being of the highest possible quality and it is the most effective way to respond to increased consumer demand for assurance of red meat quality and safety post BSE. **Company E** also explained that they use suppliers that are registered with particular quality assurance schemes since this is a particular demand of the MGRs who are their principal end customers.

Figure 5.1 Examples of how SME Food Processors Manage Food Safety and Hygiene in-House

- **Company L** explained that they store dry and fresh ingredients separately and to minimise risk of stock damage they usually order sufficient ingredients for one month's production demands only when the product cannot be stored for a longer period of time.
- **Company I** stores all of their raw ingredients for the production of trout and the trout they use in their food products on their farm in sheds that they monitor vigilantly to ensure they are clean and meet 'Environmental Health' regulations and guidelines.
- **Company F** uses both non- and organic ingredients and must ensure that they are stored separately and their organic ingredients must also be stored in accordance with specific guidelines for storage of organic produce. There is very little storage space at their processing and retailing site though, with sufficient space only for ingredients to meet daily processing needs. The bulk of their ingredients are therefore stored separately from their processing site.

Reflecting on the above, the case study SME food processors appeared to, generally, be very aware of the risks involved in not managing food safety responsibly. They did not feel however that this gave them the right to impose certain food safety management procedures and systems upon their suppliers. Indeed, it was generally explained, in a matter of fact way, that they trust their suppliers to perform with '*due diligence*' – a requirement of the FSA 1990. A number of SME food processors also suggested that, if any of their suppliers were not doing this, they were operating in a risky and inappropriate way that would be harmful to themselves and that that would be foolish and unlikely. Such findings contrast with those relating to the SME food processor case studies' relatively ruthless management and treatment of ingredients' suppliers to ensure that they receive the quality and type of produce they require. This suggests that the quality they require is hard to provide, and that they therefore feel it is appropriate to intervene in supply linkages to procure the quality of ingredients that they require.

5.2.4 Finished Produce Marketing

The remainder of this section describes what finished produce the SME food processors' prepare for sale to their end customers. The literature suggests that during the 3rd Food Regime – at the present time - SME food processors construct, develop and maintain direct linkages with consumers or MGRs (see Atkins and Bowler 2001). Table 5.3 summarises the scale of the SME food processors' finished produce ranges, revealing that they have a

diverse range of finished products. This helps the case study SME food processors to spread the risk of one product not selling as well as another, and increases their revenue earning opportunities. This illustrates that, once again, these SME food processors adopt commercially oriented ways of managing their enterprises. This issue has however not yet been considered in the agro-food marketing and agri-business management literature.

Table 5.3 The Scale of the SME Food Processors' End Product Ranges

SME Food Processor	Number of Different Products made	Total Number of End Products (calculated by taking into account different flavours and varieties within single product lines)
Company D	5	97
Company E	1	47
Company F	2	20
Company G	6	63
Company H	3	70
Company I	4	4
Company J	3	8
Company K	1	5
Company L	1	60

Findings about the type of foods that the SME food processors prepare also contrast with the literature about food processors' finished produce during the 3rd food Regime (see Ilbery and Bowler 1998; Atkins and Bowler 2001). For example, **Company D, Company E** and **Company G** do not produce non-mainstream, niche market, or specialist products. The remainder of the SME food processor sample, however, process ingredients for more specialist end products. Those case studies that create foods that are not for sale in niche markets were established before the 1980s. The majority (six) of the SME food processor case studies have been operating since the 1980s, and these create foods for more niche markets. Like the three longer established SME food processors, these six SME food processors use either one technique, or a small number of different techniques, to produce a limited range of different products. The younger SMEs also use a variety of different, and sometimes specialist, or rather exotic, ingredients to achieve a wider variety of different flavours and tastes in their end produce, which is ultimately targeted at niche markets.

These findings suggest that the SME food processors that were established during the period of time that has been conceptualised as the 3rd Food Regime are more responsive to differentiated food consumer demand. When asked what influences their new product development, most cases explained that they consider themselves to be personally and inherently aware of, or able to anticipate, food consumer demands and are therefore largely not reliant upon direct contact with actual or potential consumers or retailers of their products. What is more, questioning revealed that none of the SME food processor cases carried out market research to inform new product development, and where they owned and managed a retail outlet, they only received informal feedback about what products are preferred by their consumers. Ultimately, most SME food processor case studies explained that they produce foods that they themselves would like to consume. Such a notion is not reported in existing accounts of the MSR of the 3rd Food Regime.

Regarding the type of retail outlet used to sell their produce, findings show that where they sold their produce, and how, was important to the SME food processor case studies. Table 5.4 illustrates that relatively few of the SME food processors market their finished produce through MGRs. SME food processors gave a number of reasons for this variety of end retail outlet for their finished produce, for example:

- **Company D**: "*We are developing our business along very strict lines . . . looking to increase the number of shops we have and also the number of customers ...*"
- **Company H**: "*We market our product as we do to give our customers a unique product in their area, it also cuts down on transport costs. Also, if I were to flood the market, I would end up with hundreds of small orders which would not be cost effective for me or the customers...*"
- **Company G**: "*... you try one way, and if that works then you keep doing it . . . Making money, that's what's important...*"

Table 5.4 Marketing Outlets for SME Food Processors' Finished Produce

SME Food Processor	Market Outlets And Marketing Mechanisms Used By The SME Food Processors To Sell Their End Produce									
	Own named brand	MGR named brand	Other specialist food labels	Own shop / retail outlet	MGRs	Other food processors	Delicatessens	Smaller grocery and convenience stores	Wholesalers	Bespoke linkage with Food Service providers
Company D	✓	×	×	✓	×	×	✓	✓	×	×
Company E	✓	✓	×	×	✓	×	×	✓	✓	×
Company F	✓	✓	✓	✓	×	×	✓	×	×	×
Company G	✓	×	×	✓	×	✓	✓	×	✓	×
Company H	✓	×	×	✓	×	×	✓	×	✓	×
Company I	✓	×	×	✓	×	×	✓	×	✓	✓
Company J	✓	✓	×	✓	×	×	✓	✓	✓	×
Company K	✓	×	×	✓	✓	×	✓	✓	×	✓
Company L	✓	×	×	✓	×	×	✓	×	×	✓

Once again, these findings illustrate the variety of different approaches to business management that are used by the case study SME food processors. Such variety has not previously been considered in the literature about the UK AFS and the MSR of the 3rd Food Regime.

5.3 The Relationships between the SME Food Processors and North Cumbria

This section describes the nature and type of the relationships between the SME food processors and the region in which they are located. The concept of embeddedness, or reliance on specific resources from a particular location has been used to help explain the reason behind, and the success of, industrial districts historically and agro-food and craft based industrial networks in the 'Third Italy' more recently (see Amin 1994; Arfinni 1999; Cooke and Morgan 1992; Brusco 1982; Fanfanni 1994; Grandori and Soda 1995; Storper 1995; Sunley 1992).

Questioning revealed that the SME food processor case studies use ingredients from within North Cumbria only when they can procure the preferred quality and type of ingredients. A small number of SME food processors were able to procure ingredients from within North Cumbria and, to do that, they were involved in supply linkages with farmers. For example, **Company I** supplies most of its own primary ingredient from its trout farm, and **Company K, Company F** and **Company G** also provide some of their own ingredients from their own small holdings / farms. **Company K** also procures milk from another farm in North Cumbria, and **Company L** buy fresh milk from a North Cumbrian farm. Within the sample, **Company G** uses the most ingredients from within North Cumbria. They procure their principal ingredients (livestock) from farmers, via local livestock auction markets, in Cumbria[1]. What is more, **Company D** procure their supplies of minced beef from **Company G,** and they procure flour from the milling company that owns **Company E.** These SME food processors therefore do engage in horizontal supply linkages. This phenomenon is not referred to in the literature about the MSR of the 3rd Food Regime.

Those SME food processors who did not use local suppliers of ingredients explained that they would be prepared to use local suppliers, if the quality and type of produce available was what they required and to:

- attain flexible and easy to manage / regulate ingredients' supply linkages;
- procure high or appropriate quality supplies of livestock and wheat flour;
- operate a 'Just-in-Time' approach to the procurement and use of perishable produce;
- use their own primary produce (produce on their own small holding / farm); ad
- ensure traceability of the ingredients they use, for example milk in particular.

[1] See Chapter 6 which relates to data collected from a sample of their actual suppliers.

Most of the SME food processor case studies also expressed a willingness to use local farmers where it was possible for them to do so. However, those with specific demands and needs for ingredients of a certain quality or type, are only able to procure their ingredients from much further afield in some instances. For example, **Company F** uses organic ingredients, and procures them from a wholesaler in London since there are no local organic farmers in Cumbria that could provide them with the ingredients they need.

Local ingredients are however not the only way in which the SME food processors relate to, and use resources from within, North Cumbria. **Company L** and **Company F** have, for example, created and developed a relationship between themselves and their particular rural locations in order to help them market their produce as distinctly different to other, possibly similar, produce. Such a marketing initiative is however being widely promoted post FMD 2001 in the UK. In addition, **Company J's** company name is the historical name for the geographical region in which they are located. Furthermore, **Company G** produce Cumberland Sausage, a well renowned type of sausage for which there is substantial demand in their local area.

Apart from these however, no other SME food processor case study used the name of their location in their brand or product name(s). This suggests that the SME food processors are able, and prefer, to create and use their own brand names, and evidence shows that this may include the name of their location, but does not always. The Food Regimes literature does however appear to suggest that the use of the name of the place in which added value or specialist food is produced is a very popular way for SME food processors to market their produce in added value and specialist food markets (see Ilbery and Bowler 1998).

In sum, these findings suggest that these SME food processors would generally prefer to carve out their own identities, or niches, in the AFS in much the same way as MSFPs have developed and promoted their global brands. In stark contrast with MSFPs, who seek global recognition and maximum shares of global grocery markets, these SME food processors appear to want to promote the scarcity and quality of their produce as something that only they can possibly create. The literature about the MSR of the 3rd Food Regime highlights current high levels of consumer demand for speciality food, but it does

not explore the evolution of speciality and added value food product markets and how they may continue to exist and grow in the future. Such findings certainly contrast with the notion that the development of speciality food markets is directly and / or unequivocally related to the geographical place or space in which it is created as literature on regional branding infers (for example, see Tregear *et al.* 1998; Warde 1997). These findings also suggest that the creation of speciality and niche food markets is not purely related to increasingly differentiated consumer demand.

Besides the above, the SME food processor sample also revealed that they use a variety of different support services from providers in North Cumbria. For example, seven of the SME food processors (except **Company E** and **Company L**) were members of North West Fine Foods, the Regional Foods Group (RFG), which provides them with marketing and promotional support. The promotional events that the RFG organises with Business Link were generally considered to be 'very good', and had improved some SME food processors' awareness of their end markets. In addition to their relationship with the RFG, some of the SME food processor sample also claimed *ad hoc* use of:

- local colleges for specialist food craft / processing skills and food safety training;
- Business Link for business management support and advice); and,
- The Local Environmental Health Officers ((EHOs) to ensure that they meet the FSA 1990 regulations).

Such a variety of linkages with resources / services in North Cumbria demonstrate how it is possible to sustain SME food processor growth and development in this location. Findings also demonstrate that, to establish and develop a successful SME food processor company, or a number of such companies in a particular location, it is not essential to have ingredients supply linkages with suppliers in the same geographical location. Such a concept is not referenced in the literature about agro-food networks in the 3rd Italy (see Arfinni *et al.* 1999; Fanfanni 1994). This may be due to very different economic systems and approaches to business development in the UK and Italy generally. Further work that investigates the nature and type of relationships that SME food processors require to establish and develop their companies could however promote a deeper understanding of how and why this is the case in North Cumbria.

5.4 Hypothetical Agro-food Information and Product Exchange Supply Networks in Northern Cumbria

This section relates to literature that considers the local or regional organisation and regulation of supply and production relations to be an effective way to manage contemporary industrial production relations (see Cooke and Morgan 1992; Fine 1995; Gertler 1992; Saraceno 1994; Storper 1995). Such an approach has recently been seen as a way to provide farmers and smaller food processors with more opportunities to market their produce for better returns (Policy Commission 2002). It has also been seen as a model of agro-food supply linkage organisation that is responsive to contemporary dynamic and highly differentiated consumer demand (see Atkins and Bowler 2001; Ilbery and Bowler 1998). Elsewhere in the world, the local agro-food network model is a traditional way of organising specialty and craft based food production, for example in areas of the 'Third Italy' (see Arfini 1999; Brasili *et al.* 1997; Brusco 1982; Fanfanni 1994; Gonano 1997). It has also been used as the basis for more contemporary models of agro-food supply and production organisation in the Netherlands (for example, see Folkerts and Koehurst 1998). Taking this into account, this section offers insights into the potential viability of such a hypothetical network in the UK. It does this by describing the SME food processor case studies' response to questions about the perceived viability and management of, as well as their potential use of, such a hypothetical network between farmers and food processors in North Cumbria[2].

5.4.1 Regional Agro-Food Product and Information Supply and Exchange Networks

Only **Company I** and **Company F** supported the concept of a hypothetical agro-food product supply network between farmers and food processors in North Cumbria. **Company F** explained however that if they were to use such a network, it would need to provide the precise type and quality of ingredients they require, asserting that they would not use it simply to support local suppliers. **Company F** also suggested that a distribution system that would transport ingredients to, and finished produce from, SME food

[2] In advance of the remainder of this section, the reader should note that since the interviews were conducted, this model of supply linkage organisation in the UK AFS has gained some prominence in food and rural development policy making and implementation. This section of the chapter does not therefore aim to provide a feasibility study to AFS policy makers in North Cumbria, nor does it seek to assess whether such a policy should be implemented in North Cumbria since the fieldwork was undertaken when that was simply not under consideration. Instead, as explained in section 4.1, this work seeks to lend deeper understandings to the debate about whether and how such a model of AFS supply linkage organisation would be possible in the UK at the present time with specific reference to a case study of the North Cumbrian AFS.

processors in North Cumbria would help reduce their, and others', supply linkage costs. These SME food processors appear therefore to prefer independently organised and managed ingredients' supply linkages.

The SME food processors were subsequently asked about their willingness to use a hypothetical agro-food information exchange network between North Cumbrian farmers and food processors. Case study SME food processors stated that they would generally prefer to retain and develop direct and independent contact with their ingredients' suppliers. Such a finding suggests, again, that these SME food processors generally seek to independently organise and manage their own supply linkages and enterprises.

The sample was subsequently asked whether they would be prepared to act as mentors in such a hypothetical agro-food information exchange network between farmers and food processors in North Cumbria. The SME food processors generally showed minimal interest in playing such a role for a variety of reasons. For example, a number were concerned that such activities might be extremely time consuming, and that the direct benefits to their own enterprises from being involved in such a network might be unclear and would need to be guaranteed before they carried out such a role. In addition, one SME food processor was concerned that they would not be able to provide information that would be of any assistance to other SME food processors. In contrast with the majority of the sample, **Company G** said that they would be happy to act as an anonymous mentor in such a network, to provide advice for other food processors in North Cumbria.

It was however ultimately determined that the SME food processor sample would be willing to use a hypothetical information exchange network if:

- each actor in the network would have equal influence, and access to opportunities, in the network;
- information would be provided on an anonymous basis, to prevent direct competition securing information about their competitive advantage over them; and,
- information needs would be clearly stated so that it was only the most appropriate food processors that provided information directly related to the question asked.

In terms of support for information procurement, sharing and exchange more generally, **Company I** and **Company L** suggested that an Internet based mentoring / information

network would be an effective way to overcome some of the confidentiality issues that were of concern to the sample. Details were, however, not provided about how this could potentially be managed, or by whom. Finally, **Company G** explained that they would like more and different training opportunities to be provided by local colleges. Similarly, **Company I** suggested a need for increased and improved provision of food safety training courses locally.

Quite generally though, the sample expressed a preference for independent self-help and guidance from within their own individual businesses or from national associations that represent their end markets in the UK AFS. Indeed, with regard to external information and support linkages more generally, the sample indicated little support for external business advisers to be involved as mentors in such a network. These findings, once again, demonstrate the extent to which these case study SME food processors prefer to operate independently, in accordance with their own personal preferences and demands.

5.4.2 The Role of Government and Development Agencies in Regional Agro-Food Networks

The sample was asked about their perceptions of the potential role(s) for Government and development agencies in a hypothetical agro-food product supply, or information exchange, network between farmers and food processors in North Cumbria. This question was asked to explore how much these SME food processors would welcome the involvement of parties not directly involved in the transaction between them and their suppliers in such a hypothetical supply network. This was considered important in view of the market-oriented approach to UK AFS organisation and regulation that has been promoted via agro-food policies since the mid 1980s.

Responses to these questions were mixed. Generally, the SME food processor sample said that they would not require assistance with management of their own ingredients' supply linkages supply chains, and that they would prefer to maintain direct contact with their suppliers, as and when required. For example, **Company D** asserted: *"I don't want any more little agencies coming in and offering* [me] *advice!"*. In addition, **Company G** stated that, if they were to be involved in such a network, they would not require management assistance from external agencies.

More specifically however, there was some support for development agency and local Government support for SME food processors to help them establish and manage bespoke supply linkages with local farmers. The reasons for this included suggestions that:

- development agencies could provide essential marketing and business advice;
- local Government could promote food processors' demands to local farmers, and promote local farmers to food processors to encourage greater connectivity and trade between them; and,
- local Government in particular could, in theory, provide grant assistance to help local food processors meet the cost of using local farmers.

5.4.3 The Management of a Regional Agro-Food Supply Network

Finally, with regard to the hypothetical notion of a regional AFS supply network, the SME food processors were asked to say how such a network could be best managed so as to potentially benefit all farmers and food processors, and not simply the larger ones. This question was asked for two reasons. First of all, to identify whether the SME food processors considered this to be an issue worthy of consideration, then, secondly, to establish, if they did not, why they felt it appropriate not to protect smaller farmers and food processors against their larger counterparts.

Answers to this question varied, revealing, for example, some preference for co-operative working and organisational principles (e.g. one member, one vote), or a more bureaucratic approach of establishing a maximum turnover level for participants in the network. More innovative approaches were also suggested, such as sponsorship of the network by MSFPs that would cover the cost of use of the network for all involved in it. These responses demonstrate two points. First of all, there was no consensus about a viable way forward amongst a very small number of SME food processors. Secondly, there was a variety of highly individualistic opinions amongst these food processors. It is therefore reasonable to suggest that it would be difficult to meet all SME food processors' demands for, and from, such a local agro-food network.

5.5 Summary

This section considers the key findings discussed in this chapter in relation to the study's objectives. The chapter had three aims, each of which related to the research objectives:

- First of all, the chapter aimed to establish how and why these SME food processors were established, and have developed, throughout the 2nd and 3rd Food Regimes in a remote rural area. This was done in section 5.2.
- Secondly, the chapter sought to develop an understanding of whether, how and why the SME food processors relate to, and use resources from within, the region in which they are located. This was done in section 5.3.
- Finally, the chapter sought to determine the SME food processor sample's perceptions and opinions of the notion of a hypothetical regional agro-food produce and information supply network. Section 5.4 describes the sample's response to these questions with specific regard to their relative willingness to be involved in, or to use, such a network. It also describes their opinions about the most appropriate way to manage such a hypothetical product and / or supply network between farmers and food processors in North Cumbria.

To summarise the above, first of all, it appears that the SME food processors' supply linkages are organised and regulated in a variety of highly individualistic ways, and, in most cases, decision making was carried out by the owner / manager. There were also some examples of a division of managerial labour (though this is rare). Such features indicate a tendency towards a 2nd Food Regime, and Fordist MSR, based approach to supply linkage organisation and regulation. In contrast, some cases demonstrated a 3rd Food Regime, and post-Fordist MSR, like approach to supply linkage organisation and regulation. For example, there was one instance of a complex vertical management structure (**Company E**), and most cases produced a wide variety of different types of products, selecting ingredients' suppliers on the basis of the quality and type of ingredient they could provide. Finally in this regard, in almost all cases (except **Company E,** which was managed by its holding company and the national bakery company that leased its factory and production resources from its holding company), the SME food processors demonstrated a somewhat self-satisfying approach to new product development and business management. Virtually all cases clearly stated that they produced foods that they thought would sell, and which they wanted to, produce and that they did not seek evidence of consumer demand for new products in advance of their development.

Second, the SME food processor case study findings demonstrate that the use of resources from within the region in which they are located is related to individual enterprise characteristics and demands. Like the MSFPs (see Chapter 4, section 4.5), the SME food processors procure and use resources that enable them to maintain their business activities.

In addition, they are generally willing to use farmers in North Cumbria as suppliers, but only if the precise type and quality of produce they require is available from them. Finally in this regard, they prefer to use their own name as a way to market their produce rather than simply the name of the place in which they are located. While these findings are not incompatible with current drives towards more regionalised AFS developments, they do suggest that such an approach to AFS organisation and regulation would not be an appropriate way to stimulate development amongst these food processors in this location. They also suggest that these SME food processors are highly independent.

Thirdly, it is perhaps not unsurprising that the SME food processors demonstrated little support in principle for a hypothetical regional agro-food information and / or product supply network with other food processors and farmers in North Cumbria. Instead, they expressed a distinct preference to maintain direct and personal linkages with their suppliers, and to provide information to other participants in the AFS in North Cumbria on an anonymous basis. The sample also did not suggest how to manage such a network for the benefit of small and large food processors and farmers. These findings again highlight these SME food processor case studies' highly individualistic approaches to enterprise continuity, and engagement with, or participation in, the UK AFS.

Finally, the key findings suggest that these SME food processors are independent participants in the UK AFS. They appear to be able to make decisions based on their own personal opinions, preferences, knowledge, and experience. They appear not to be affected by either consumer demands, or MGRs' demands. The way in which they managed their enterprises in-house was affected by food safety legislation, which, following BSE, appeared to be a highly significant external influence on one of the meat processors in particular.

This section has summarised how this chapter relates to the research objectives. The chapter as a whole contains a number of key findings in relation to details in the conceptual framework. These key findings are synthesised in Chapter 7, alongside those from the MSFPs' and farmers' case studies (presented in Chapters 4 and 6 respectively).

Chapter 6

A Case Study of Farm Enterprises in North Cumbria

6.1 Introduction

This chapter considers the findings from in-depth interviews conducted with 17 dairy and livestock farmers (**Farmers A – Q**) in North Cumbria and it has three aims. To address the research objectives (see Chapter 3, section 3.2), it uses the case study findings to extend understandings of:

- How and why these farmers came to be established and developed in North Cumbria under advanced capitalism and critically assess whether this occurred as described in the Food Regimes literature.
- The relationship that these farmers have with the region specifically in terms of how they manage their supply linkages with their primary end customers in the region.
- The case study farmers' perceptions of the viability of a hypothetical regional agro-food produce and information supply network.

As described in Chapter 2, literature about the AFS reports that, between 1947 and the 1980s, farmers were encouraged to become larger, more specialised, and more intensive food producers. To do that, farmers became dependent on capital inputs and the intensive use of family labour to maintain and reproduce their operations (see Commins 1990; Goodman and Redclift 1989; Goodman *et al.* 1987; Ilbery and Bowler 1998; Marsden 1990; and, Ward 1993). This approach to farm development demonstrates some of the key features of the MSR of Fordism. In contrast, between the 1980s and 2001, farmers have been encouraged to produce food less intensively, and to diversify their farm enterprises, so to become more environmentally friendly (for example, see Edmond *et al.* 1993; Marsden 1990). This approach to farm development demonstrates some of the key features of the MSR of post-Fordism (see Bowler *et al.* 1996; Ilberry and Bowler 1998; Shucksmith 1994). This is not the

case for all farmers though. A substantial number of farmers in the UK have continued to intensively produce large quantities of particular types of food. Section 6.2 describes the key findings from interviews with 17 Cumbrian farmers to critically analyse whether the literature about Food Regimes accurately captures how their farm enterprises were established and how they have evolved and continued to exist and function in this location.

Secondly, it is generally accepted that farmers relate to their location primarily through the biophysical environment (see Grigg 1992). It has also been suggested that farmers have little desire or willingness to relate to their end customers (see Policy Commission 2002). This sample of farmers currently sells the majority of their end produce to customers (food processors) in the same region as them (within a maximum radius of 50 miles of their farm in most cases). All of the dairy farmers interviewed supply raw un-pasteurised milk to **Company A** in Dalston, and all of the livestock farmers sell their livestock to **Company G** through livestock auction marts in Cumbria. Dairy farmers also use local livestock auction markets to dispose of their calves and heifers that are unable to produce milk. Section 6.3 describes how and why these farmers relate to their end customers, in the same location, as they do in order to contribute new understandings to regional and agricultural geography debates about the same. In addition, Food Regimes literature suggests that geographically proximate relationships between farmers and their end customers are a relatively new phenomenon in the UK AFS and that they are key features of the MSR of the 3rd Food Regime (see Ilbery and Bowler 1998). This hypothesis is also explored in section 6.3.

Finally, the hypothetical concept of regionalised AFS development is gaining popularity in the UK (see Chapters 2, 4 and 5). Since the 1990s, the notion of regionalised supply linkages has been seen as a way to bring about economic development in the UK (see Cooke and Morgan 1992; Gertler 1992; Saraceno 1994; Storper 1995). In the 3rd Italy, such a way of organising and regulating supply linkages between farmers and food processors and their end markets has helped such enterprises to grow when larger food companies have suffered reduced turnover (see Brusco 1982). This is the subject of increased attention in the UK amidst growing support for regional economic development models more generally. To date though, little work has been done to critically evaluate whether, how and why farmers would or would not prefer to

use this model as opposed to their existing relationships. Section 6.4 describes the farmer case studies' perceptions of the viability of a regional supply network model.

6.2 The Farm Enterprise

As noted above, this section describes how the sample of dairy and livestock farms came to exist, and be owned and managed as they are; their production activities; approaches to, and styles of, management; and, how and why they market their produce as they do.

6.2.1 Family Farms

Table 6.1 below summarises the key characteristics of the farmer sample. It shows that all farmers in the sample are aged above 35 years of age and have worked on their family owned or rented farms for between five and 20 years. It also demonstrates that the majority of the farmer interviewees were male and had no alternative work experience. In addition, Table 6.1 reveals that, in this sample of farmer enterprises, there has been little change in their production activities since the existing principal farmers took over the farms, and that all farms were family businesses. Regarding the farmers' families, the majority of the farmers' children were aged below 18 years, and ten farmers had at least one son. Most farmers' sons worked on the family farm, and **Farmer I's** son was a full time partner in the family farm business. Those children who did not help out tended to be either too young to do so, or were female with no interest in the farm. In particular, **Farmer G** expressed concerned about whom he might pass the farm to since he only has daughters. Generally though, principal farmers were confident that their sons would eventually take over the farm, which is a typical feature of farming in the UK. These findings are generally quite typical of recorded accounts of farmers and farming in the UK.

Table 6.1 Summary Details of the Farmer Sample

Farmer	Relative scale and farm type	*Size of farm*	Length of time in farming	Education	Age and sex of farmer
Farmer A	Large lowland dairy	2 farms: 370 acres in total	7 years; previously employed as pharmacist	University: studied *Pharmacology*	35-45, female
Farmer B	Large lowland dairy	250 acres	9 years	University: studied *Agriculture*	45, male
Farmer C	Large lowland dairy	340 acres	Since leaving school at 16	Agricultural college	35-45, male
Farmer D	Large lowland dairy	345 acres	Since leaving school at 16	Agricultural college	45-55, male
Farmer E	Medium lowland cattle and sheep	417 acres	Since leaving university, over 20 years ago	University: studied *Agriculture*	40-45, male
Farmer F	Large lowland dairy	365 acres	Since leaving school at 16	Agricultural college	35-45, male
Farmer G	Small beef	512 acres	Since leaving school at 16	Secondary school	48 , male
Farmer H	Large lowland dairy	365 acres	16 years	Agricultural college	35-45, male
Farmer I	Large lowland dairy	410 acres	Since leaving school at 16	Agricultural college	45-55, male
Farmer J	Large lowland cattle and sheep	740 acres	Since leaving school at 16	Secondary school	45-55, male
Farmer K	Medium / large lowland cattle and sheep	220 acres	Since leaving school at 16	Secondary school	25-35, female
Farmer L	Medium / large lowland dairy	270 acres	Since leaving school at 14	Secondary school	50, male
Farmer M	Large lowland cattle and sheep	630 acres	Since leaving school at 16	Secondary school	48, male
Farmer N	Medium beef and B+B on farm	600 acres	Since leaving school at 16	Secondary school	35-45, male
Farmer O	Medium lowland cattle and sheep	2 farms: 450 and 550 acres	Since leaving university, 1.5 years ago	University: studied *Agriculture*	22, male
Farmer P	Medium lowland dairy	200 acres	Since leaving school at 16	Secondary school	35-45, male
Farmer Q	Large lowland dairy	220 acres	Since leaving agricultural college; 6 years as principle farmer	Agricultural college	35-45, male

The scale, ownership structure, and mode of control over the farmer sample's farm enterprises were diverse. For example:

- **Farmer A** and her husband had invested in two holdings to enable them to expand their dairy when they left a partnership they had previously been involved in with **Farmer A's** brother in law.
- **Farmer E's** holding is part of a family owned business which is comprised of three farm holdings that are strategically located and managed to allow the entire extensive livestock production system (from breeding to finishing cattle and sheep) to take place within the family business.
- **Farmer C** and **Farmer D** had recently bought their farms, but their family had previously always rented the farms they had purchased. In **Farmer D's** case, his father had retired and transferred ownership to his son.
- **Farmer F** had bought land a short distance from the rented family farm to expand production and he hoped to buy more land when his father retired and he inherited the business.
- **Farmer M** had rented some land for extra grazing pasture, but, since the BSE crisis of 1996, the land was now underused.
- **Farmer L** owns most of the farm, and rents some land to his principal end customer (**Company G**, see Chapter 5).
- Finally in this regard, only two farms were wholly rented with, for example, **Farmer K** and her husband renting farms to enable them to relocate, as and when they want to.

These findings demonstrate that these farmers have adopted ways of organising production in a way that suits them, and which enables them to meet their business objectives. The literature generally suggests that farmers do not act strategically and lack the capacity to do so. It has also been suggested that farmers simply favour production systems with the most public support available. In contrast, the case study findings suggest that decisions about enterprise management are made with awareness of market opportunities for their produce, are complex, and are made (in view of knowledge gained from their end customers and an understanding of their own personal circumstances) by the farmers themselves. Farmers generally became the principal farmer of the holding that they work on through family inheritance. Exceptionally though, **Farmer K** and her husband were farm tenants, who moved to their current farm from another, elsewhere in Cumbria, less than a decade ago.

In terms of business decision making, as mentioned above, the case study farmers demonstrated an ability to make independent strategic decisions about business management, development, and continuity. For example, most principal farmers were solely responsible for decision making about their entire farm holding and were directly involved in production and marketing on the farm. In addition to this, since all farms were managed by a family partnership, the wider family also played a role in making decisions about issues that affected the long-term viability of the farm. Partnerships generally comprised a husband and wife, but four farmers were in a family partnership that included their wives and their parents.

Such findings are once again quite typical of existing accounts of farming in the UK. Questioning revealed however that some partnerships were organised with a view to more commercial considerations than others, with responsibility for decision-making being allocated to specific individuals that possessed particular experience and skills. For example:

- **Farmer A** managed the administration side of the partnership whilst her husband was directly involved in managing production. This was also the case for another eight farmers.
- **Farmer E** makes all marketing decisions for the business as a whole (which comprises three separate holdings), as does **Farmer F**.
- Finally in this regard, three other farmers were solely responsible for all of their respective farm's decisions regarding stock procurement and marketing at auction, as well as the management of production on the farm.

It is clear that these farmers divide labour use within the farm according to individuals' expertise and experience. Existing literature does not however consider that such considerations are made, nor does it acknowledge that farmers recognise that family members (the majority of the farm workforce in all of these cases) possess different strengths that can be used in different ways to help manage the farm.

6.2.2 Farm Management

The ways in which the case study farms used their capital and revenue resources to implement management decisions varied. In terms of revenue resources, most farms were heavily reliant upon the farm family as workers, in a full or part time capacity. There was little use of part time labour and very little persistent and ongoing dependence on agricultural contractors. Only **Farmer G** considered contractors to be a permanent feature of his farm's workforce. Capital resource application and use by the case study farms also varied. For example:

- On five farms, the machinery and equipment used on the farm was owned outright by the farmer. The remainder of the sample had loan or finance arrangements for machinery and equipment.
- Only **Farmer J** owned and shared machinery with his neighbours.
- Farmers tended to use non-family and contracted labour rather than purchasing extra machinery and equipment.

These findings suggest a highly independent approach to the intensive use of revenue and capital resources on the case study farms as recorded in the Food Regime and wider agro-food political economy literatures (for example, see Ward 1993). That such an approach was identifiable in farms at the end of the 20th Century suggests that certain aspects of what the Food Regime literature considers to be characteristic of the MSR of the 2nd Food Regime, and prevalent only up to the 1980s, is not defunct. This approach was common amongst the case study farms.

In contrast with literature about the 'agricultural treadmill' (see Ward 1993) however, the case study farmers demonstrated a variety of approaches to capital investment activity. Indeed, five farmers appeared to have been more cautious than others in their sample in their past capital investments and had pursued quite different approaches to this. For example, **Farmer P** had invested in diversifying his farm by converting a redundant building into a B+B, and **Farmer F** had made no investments in the last ten years and was waiting to inherit the family farm tenancy from his father before doing so. Findings also reveal that investment activity and levels were not directly and positively related to profit levels. For example, despite the fact that their profit levels had fallen in the past ten years, **Farmer A** and her husband had

expanded their production. The findings also show that the case study farmers have concentrated on conventional agro-food production, as opposed to alternative income earning opportunities. It is also clear that not all farmers felt it necessary to pursue intensive capital investment activity to maintain their agro-food production activities or diversify their income earning opportunities. Existing literature has not however identified with such behaviour.

Regarding the future of their farm enterprises, in all 17 cases, farmers were despondent about their respective enterprise's prospects and only **Farmer L** had made future investment plans. Interviews revealed that much of this despondency was due to the BSE crisis of 1996 that had impacted the farmers quite substantially. At the time of the interviews, farmers' incomes were low, and 15 of the 17 farmers interviewed had also taken a loan for their farm business in the ten years prior to the interview. Only **Farmer G** claimed that he was concerned about the size of the business debt though. These findings suggest that these farmers did not see expansion and securing more loan capital as a way out of the crisis at the time, and that limited cash flow was a rather permanent state of affairs for them. Literature has previously implied that, prior to the 1980s at least, farmers applied capital to their enterprises intensively. Since then, agricultural subsidies have however been cut. The case study farmers' actions demonstrate that, in an environment with fewer support payments, farmers are more cautious with their use of capital than they have been in the past. Much of the literature about the MSR of the 3rd Food Regime highlights that farm payment support structures have altered significantly since the 1970s. It does not however theorise about the impact of that upon farm enterprises, aside from outlining that farm diversification is a principal way forward for most farmers.

In terms of their use of other resources, some of the case study farmers demonstrated a willingness to use contracted labour or machinery to increase enterprise flexibility. For analysis purposes, other types of support that the case studies used were divided into 'conventional' (traditional and long established) and 'alternative' (relatively newly created or established) (see Figure 6.1). Categorising sources of support and resources in this way shows that most of the case study farmers used a combination of conventional and alternative sources of external support. What is more, fifteen farmers used alternative types of external service providers, and 13 of these cases were dairy farmers. In addition, whilst each farmer

demonstrated use of a different combination of service providers, the majority of livestock farmers tended to use the NFU and MAFF (renamed DEFRA in June 2001) as a primary source of support or assistance.

Figure 6.1 Types of External Support used by the Farmer Sample

Conventional	Alternative
ADAS	The Rural Development Commission [43]
NFU meetings / membership	Agricultural contractors
MAFF representatives	Grocery retailers
Colleges / TECs	Food processors
Accountant	Business development agencies /
Local government	organisations

The nature, extent, and type of relationships between farmers and support service providers have received little attention in the literature to date. However, reflecting on these findings further, it is apparent that over half of the farmer sample considered external services to be a necessary and acceptable feature of their approach to farm business management. It is also clear that farmers felt such service providers demonstrate value for money in terms of the type, amount and quality of assistance they provide. There were however some contrasting opinions. For example:

- **Farmer E** considered external service providers and support to be unnecessary for the day-to-day management of his farm. As the Chairman of the National Sheep Association and the holder of a degree in agriculture, he considers that he has sufficient information and knowledge at his disposal to manage his farm effectively and efficiently, without being dependent on other people for support on a regular basis.
- **Farmer N**, the farmer representative for the Lake District National Park Management Committee, claimed to be able to manage his farm independently without advice or assistance from supply chain intermediaries and external agents / service providers.

These findings suggest that farmers that do not occupy a specialist advisory position in the wider agro-food industry, or possess specific agricultural qualifications, are more willing to

[43] The Rural Development Commission was part subsumed by the Regional Development Agencies in England in April 1999. The Countryside Agency also took on part of its work remit at this time.

work with and alongside external providers of support to improve their business performance. To date, such a finding has not been considered in the literature.

In addition, the nature and degree of interaction that the sample has with their end customers (principally, **Company A** and **Company G**) was also investigated to determine whether the case study farmers saw such relationships as positive and supportive. Findings reveal a variety of relationships in this respect. For example:

- Five farmers stated that they prefer to operate remotely from their end customer, choosing to manage their businesses with their own knowledge of farming and the end market, over and above any other potential influences. Two of these farmers asserted that this was the only possible way to manage their own businesses. The other three stated that they simply acted in this way through habit.
- Another five farmers explained that they strive to maintain close relationships with their end customers, and occupy positions as farming industry representatives in a variety of national and local institutions. For example, **Farmer C** and **Farmer H** are members (Chair and Deputy respectively) of **Company A's** farmers' committee (see Chapter 4) and represent all farmers who supply milk to **Company A** at Dalston. In addition, **Farmer E** is the Chair of the National Sheep Association, which represents all sheep breeders in the UK. Furthermore, whilst **Farmer L** is not a farmer representative himself, his brother is the local NFU secretary, and the partnership is involved in a novel landlord and tenant relationship with their end customers. **Farmer J** and **Farmer N** are also shareholders in the auction company that owns the mart where they sell their produce, and both seek to maintain close relationships with their end customers and the auction company.

This willingness to establish and maintain close relationships with end customers contrasts strongly with other accounts of farmers' persistent resistance or unwillingness to engage in such communications (for example, see Policy Commission 2002). In view of that, such accounts of farmer behaviour appear to be somewhat partial, and therefore not representative of farming as a whole.

6.2.3 Production Activities and Supply Linkage Management

The interviews revealed that none of the farmers use any information from global or European sources, and only three farmers used advice that had to be paid for. Instead, most farmers used different combinations of local and national sources of information to raise their awareness of the opportunity to sell their produce. Local sources of information included existing and potential end customers, salespeople, neighbours, the NFU and MAFF. For example, it was explained:

- . . . *we're in a buying group, so a lot of information that we do get is from that. Y'know . . . we get prices, y'know* [and] *neighbours are in it as well . . .* [**Company A** also] *give us information every month [regarding] milk production . . . which is probably the bread and butter of the farm, really . . .at the present moment*...(**Farmer H**).

- ...[we get information] *from the people we supply* ...(**Farmer O**).

- ... *you get information off your neighbours definitely . . .* [and] *we always have contact with abattoirs...we have contact with those all the time, because they're our buyers in the auction mart . . .*(W)*e don't use ADAS so much, but . . . of course we're members of the NFU . . . we use the NFU quite a bit . . . we go to* [local] *meetings . . . MAFF* [also] *give us certain information, yeah...* (**Farmer L**).

- [We talk to] *other processors as well. . . to compare prices . . .to make sure that you're getting a* [fair price] . . . [And] *you're always checking papers and . . . these phone lines*[44] *that you get; you can get updates on prices* [from them, and] . . . *there's quite a few of them ...* (**Farmer F**).

In contrast with the majority of the sample, **Farmer E** was seen to be a provider, and not a seeker, of information about end market opportunities and farmers' relations in the UK AFS. As the Chairperson of the National Sheep Association, he is regularly and frequently called upon to provide information regarding the UK sheep market on a regular basis. So, when he requires information, he explained that he simply uses his personal industry contacts. He stressed that he also watches market activity independently:

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[44] There are telephone lines that provide information about market prices and trends.

... The biggest influence is actually watching the market operate in itself . . We get a certain amount of feedback from . . . customers . . . at the market itself ..... We discuss what he's doing; what he's paying; what his likely demand is next week. I know what . . . his demand pattern is over the year, because . . . I know him very well and have a constant contact with him . . . (W)*e don't depend on him for custom, but, we try to match our production into when his demand is higher...* (**Farmer E**).

In addition to the sources of local information discussed above, three farmers also use the 'Farmers Guardian' (weekly newspaper) and other media. **Farmer G** explained why he does this:

I like . . . [it because it] *tells you when your subsidies are coming;* [in fact] *all the farming news . .* .[For example,] *"Sheep premium's gonna be paid £5.25 this year; gonna be paid out in February onwards", and things like that . . .Everything, you know . . .*

It appears that national sources of information are used to gain a reliable and general overview of the situation facing the industry and individual sectors generally and that local sources of information are used to secure more specific information or advice about actual and potential marketing opportunities. The findings also suggest that local sources of information are preferable for many of the case study farmers. Such findings demonstrate a need for information to continue to be made available locally, at low cost, or free of charge, and principally from people that farmers market their produce to. Such reasoning challenges the reported persistent existence of productivist and arms' length approach to marketing amongst farmers, and suggests that these case study farmers seek to meet market demands generally. This approach is reminiscent of accounts of the MSR of the 3rd Food Regime.

In addition to this, farmers were also asked to explain how and why they market their end produce as they do. As detailed above, in section 6.1, all of the dairy farmers interviewed supply raw un-pasteurised milk to **Company A** in Dalston, and all of the livestock farmers sell their livestock to **Company G** through livestock auction marts in Cumbria. Dairy farmers also used local livestock auction markets to dispose of their calves and heifers that are unable to produce milk. For example, **Farmer F** explained that they have a dairy and livestock production mix and this is simply what they do, regardless of the fact that livestock rearing is time consuming and not very profitable:

... (I)*t's bloody hopeless what we're getting for* [our livestock at market] . . . *but . . . we're doing it. We keep thinking well, may be next year might be better, next summer might be better, may be something else will happen ... We've been saying that* ...[for] *two years past March*[45] . . . [But, in the] *long term, I think we're going to have to change our policy* . . . [and] *sell our calves, just get rid of them* . . . *It's an absolute bloody waste, it's unbelievable . . .It's unbelievable the way things are going now* . . . [Unfortunately, we can not say] . . . *I can give you Aberdeen Angus prime beef for Marks and Spencers ... we're not in that league I'm afraid, and really I can not see us ever doing that, 'cause this is the road I've got to go down. We've got the* [dairy] *parlour, we've got the tank, we've got a decent order with* ***Company A*** . . . *You can'nee do everything* . . . (**Farmer F**).

In this case, the livestock auction is largely a convenient way to dispose of non-premium stock. In addition, **Farmer K** is a dairy farmer, but sells her sheep at the local auction, as does **Farmer G.** He explained:

. . . *I try to take* [the livestock] ... *on a week when I think it's gonna be a better trade . . .There are some that sell stock every week throughout the year, and they have certain people go there every week to buy it. I don't fall into that category . . . When I take my livestock, I don't know who's going to* [buy] *it - it might be a dealer one week, and a farmer another. . . Carlisle* [auction] *may, or may not,* [offer a] *better* [price], *but it takes a lot more of the day up. . . To take them to Carlisle would take at least two hours extra . . . than to take them to Cockermouth...* (**Farmer G**)

In contrast with the remainder of the dairy farmers in the sample, **Farmer I** relies solely upon the contract to sell his milk to **Company A** every other day. He only produces milk on his farm, and has used this supply linkage since deregulation of the UK milk market in 1994 because it provides him with a guaranteed market for his produce. In contrast with the dairy farmers, only one livestock farmer used a combination of a contract and the auction market for the sale of their produce. Furthermore, **Farmer O** sells the cereal he produces to a local grain merchant, and his livestock is sold to **Company G** via the local livestock auctions[46].

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[45] March 1996 the time of the outbreak BSE crisis in the UK.

[46] As do four livestock farmers who sell all of their produce at local auctions within Cumbria every week, with the majority being procured by **Company G.**

The variety of marketing channels used by these farmers demonstrates a general willingness to use end customers that are located close to the farm holding and who are easy to access. Maximising returns is important, but it is more important to sell produce at lowest cost, which can mean selling when the market price is relatively low, so as not to incur additional overheads. Such findings demonstrate these case studies' willingness to use more cost effective approaches to farm business management and to not always market their produce for profit.

The length of time that the farmers had, respectively, sold their end produce to **Company A** and **Company G** varied. All dairy farmers had sold to **Company A** since UK milk market deregulation in 1994, but one of the six livestock farmers explained he had not 'always'[47] used local auction markets. He previously sold his cattle deadweight by contract to a large abattoir located outside of Cumbria. However, he had reverted back to using the local livestock auction market when he found the prices he received were not competitive, and the abattoir was unwilling to discuss why his stock had not achieved a better price.

The livestock farmers gave a number of reasons for their use of livestock auction markets, which included reference to the opportunity for a time resource efficient, guaranteed sale and income, in a fair and competitive marketing forum. From their responses, it is clear that case study livestock farmers are of the opinion that the livestock auction market is necessary. For example, **Farmer G** asserted:

[47] Discussion clarified that 'always' meant within the farmers' living memory.

The auction company... is the best way of selling cattle there is. I'm on the National Beef Association committee, and when I went [to one of their meetings] *there was mostly a lot of men* [for] *dead-weight* [contract selling] *and I was invited on to the committee, and I said, "If you're gonna be talking about dead-weight, I don't even want to be on!" . . . People say you get the best price through dead-weight, but if every farmer goes through dead-weight, we're absolutely finished . . . We might as well pack up!. . . . If there wasn't an auction mart, they would be able to give us* [any price] *they wanted, and it's nearly happening with sheep... You know* [dead-weight buyers have] *got the sheep* [price] *low, and they're never gonna put it up. . .* [But], *with an auction mart, you go and . . . you sell your beef and you're absolutely, ninety nine and a half per cent sure, that you get your money. You get paid on that day, and you get it in the bank . . .* [But, if] *you go and sell twenty bullocks to an abattoir, and that company goes bust ... you've lost £12 000! ...* ***Who can stand that?!*** *. . . So that's the main reason why I go to an auction mart* [because] *it keeps the price and you get your money...* (Emphasis in original response to questions).

In contrast with the livestock farmers, the dairy farmers' supply contracts provide them with contact only with their end customer, unless they take action to increase their contact and awareness of the market, as **Farmer A** had. Livestock and dairy farmers explained that they maintain contact with their end customers because it provides them with information about their product and precise end market demands. For dairy farmers in particular this included advice about how they can change their production to attain high quality produce that will secure them a good return. Case study farmers thus prefer close contact with their end customers to improve their awareness of market demands and improve efficiency of their production.

Farmers were subsequently asked how they initially became aware of the opportunity to sell to their current end customers. Most farmers had become aware of their end customers via word of mouth, initiated by their end customer, and circulated through the farming community by other farmers that they came into contact with. In addition to this, two other farmers explained that they had become aware of their end customers through national[48] and local[49] sources of information, principally via the media. Both of these were dairy farmers that sell their produce to **Company A,** and they are also members of **Company A's** 'Farmers' Committee'. To secure an end market / customer for their produce, it therefore appears that the dairy farmers,

who occupy non-local or more professional roles in the industry, use different sources of information to those that do not. In contrast, regardless of their non-local and more professional roles in the industry, livestock farmers claim to have used only local sources of information to identify with their current end customers.

The sample was also asked why they chose to use their current end customers, and a variety of reasons were given. The majority said that selling their end produce as they did made their enterprise management more effective and efficient, and that it provided them with a guaranteed end market for their produce. These conditions were, however, not considered to be mutually dependent. In addition to this, two other farmers said that this was simply how they market their end produce, and a number of other farmers provided additional and alternative reasons for their choice of end customer. For example, **Farmer F** explained:

[The] *price they were* [offering] *at the time, obviously. . .* [affected our decision. But] *. . . the other thing we kinda fell for wi'* [**Company A**], *was that the . . . milk was going to. . . be used for chocolate . . .. Y'know it was going into* [**Company A's**] *products, Y'know - it wasn't just wholesale milk; it wasn't cheese; wasn't another market that's vulnerable. Kids still eat chocolate!* . . . [In] *years to come, may be cheese and butter and stuff like that* [will disappear] *... There's mountains of the bloody stuff all over the world* . . . [But,] *I think if you had a pound of butter and a Kit Kat - you'd eat a Kit Kat !* [But, that's] *just my own opinion! . . .*

Farmer F suggests here that he believe that selling to the **Company A** will be a long term opportunity for them and **Farmer C** was of a very similar opinion. In addition, all farmers stated that the price they receive for their end produce is a key influence upon their choice of end customer. The sample also revealed other important issues in this regard. These included, for example, being treated as an equal by their end customers, and being able to meet their own, personal demands. For example, regarding her personal demands, **Farmer A** explained:

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[48] For example the media, ADAS, and the NFU.
[49] For example neighbouring farmers, end customers, and the local auction market.

(W)*hen we were picking a place to sell our milk . . . I said that proximity was important . . .* **[Company A]** *said , "You shouldn't pick us for that reason", and I said, "But I am green, hah-hah!! I am environmentally friendly and I don't want a lorry to take my milk two hundred miles"... So I think* [proximity is] *important . . .* [Besides] (w)*e wouldn't like to have the hassle of getting it there... Gosh!! It would be horrendous, wouldn't it ?!!*

Once the reasons for linkage with their end customers had been established, farmers were asked to describe how their supply linkages were organised and regulated. This varied purely as a result of their end customer demands. For example, all of the dairy farmers in the sample use supply contracts with **Company A**, and, once a contract is agreed, the farmer is legally required to sell their milk only to **Company A**. **Farmer A** and her husband however operate two dairy farms, and sell milk from one to **Company A,** and milk from the other to Milk Marque. She feels that this enables them to compete more effectively in the end market, to secure a fair price for their milk.

Linked to this, to determine influences upon changes to supply linkage and organisation, questions were asked about whether and how there had been any changes to the way in which farmers' supply linkages with their end customers were organised and regulated. Findings revealed that, in the 1990s, dairy and livestock farmers had experienced demands for higher quality produce. **Farmer L** explained what impact this has had upon livestock farmers' enterprises in particular:

...Ooh, yes, there's been all sorts of changes . . . (J)*ust lately . . . we have to make sure that our cattle are absolutely spotlessly clean for a start . . .* [Cattle] *tagging's all changed; once upon a time you could show cattle in an auction mart, and if it had a tag missing* [it] *wouldn't have mattered. But now . . . if they're found without a tag* [you can be fined]. . . (A)*nd then, of course, it's changed now from the single tag to the double tag . . .* [and we] *have passports, for them. There's been a lot of changes - meat hygiene, you know . . .* [it's] *only . . .* [since 1993] *really that all these changes have happened ...*

In addition to changes in the quality of produce demanded, two farmers mentioned that, for the dairy farmers specifically, the way in which **Company A** collects milk from their farms had changed. **Company A** now ask farmers to store milk on their farms for one day, and have it collected every other day, as opposed to it being collected every day as it had been

traditionally. This change has increased **Company A's** ability to manage their ingredients' supply chains more flexibly, and has increased farmers' liability for management of the raw finished product before the food processor receives it. **Farmer A** explained that, for them, this meant that they had to purchase storage tanks for each of their two holdings. This meant that there were now additional demands on them and their time, for example, her husband must now always meet the tanker from one or the other of their (two) end customers, late at night or early morning every other day. **Farmer A** also explained that storage of milk on the farm for a longer period of time has also increased the amount of food safety risk that they must accept if they are to sell their produce. For example, one of their storage tanks had recently become contaminated and they had to seek specialist advice from **Company A** to resolve the problem as soon as possible to prevent loss of income. She explained that this had been extremely time consuming for them, and had reduced time spent carrying out other activities and tasks on their farm.

In summary, changes to the way that supply linkages are managed have been the result of case study farmers' end customers' demands and have created additional work for both dairy and livestock farmers. As a consequence of the changes, the case study farmers' direct responsibility for the overall supply linkage has also increased. It thus appears that their end customers are able to indirectly control and directly influence the case study farmers' supply linkage organisation and management. This phenomenon is mentioned briefly in the literature (for example, see Atkins and Bowler 2001), but the debate is generally focused on how MGRs exert control over farmers and food processors alike (for example, see Policy Commission 2002). Based on case study findings, food processors appear thus to act as a conduit for MGRs' and food consumers' influence upon farmers in the UK AFS.

The notion of influence and control in end customer supply linkage organisation and regulation was explored further. Questioning revealed that dairy farmers felt that their supply linkage with **Company A** was managed in a balanced and collaborative way, which is neither determined, nor influenced, purely by their customers, or purely by themselves. In addition, a large proportion of the sample felt that they managed their supply linkages quite independently. Other farmers meanwhile explained that they are happy to rely on *ad hoc*

feedback or information from other farmers, their end customers, or the livestock auction market. For example:

- **Farmer L** explained that they, "*always have contact with . . . our buyers in the auction mart...*".
- **Farmer G** explained that they get market information from his brother, because, "[he] *owns half an abattoir in Blackpool... On a Thursday... me brother has a man in the market, and they'll . . . make sure we have a decent trade, you know what I mean?...*".
- **Farmer F** explained, "*Well, aye* - [we] *talk with neighbours . . . Aye I suppose you ... We're in a buying group, so a lot of information that we do get is from that. Y'know, we . . . get prices, y'know - neighbours are in it as well . . .* [Also,] *Nestle give us information every month, y'know . . .as far as milk production is concerned, which is probably the bread and butter of the farm, really, now...*".

Despite their end customers' demands meaning change to the nature and cost of their operations, these farmers did not find the relationship between them and their end customers to be unduly restrictive. The sample was also asked how envisaged supply linkages could, theoretically, be effectively and appropriately organised and managed. There was overwhelming support throughout the sample for farmer and end customer collaboration in their end market supply linkages irrespective of whether supply linkages were based on contracts or more *ad hoc* sales. Thus, the current nature of their supply linkage organisation and regulation were seen to be as good as they could possibly be.

Reflecting on this issue more specifically however, **Farmer E**, a livestock farmer, explained:

...(R)*ealistically, it doesn't matter . . . you can't defy supply/demand reconciliation . . . that pressure's going to operate regardless of how you want it.* [to]*...* [I]*f you form a contract with somebody, the next renewal of contract will reflect what's happening on the supply / demand situation.... So, pressures do have to be resolved sooner or later . . . and if they're not resolved ... the industry as a whole may miss opportunities. . .* [I]*f you don't get the right signals working through the market chain, you may miss opportunities as an industry as a whole.*

In his response **Farmer E** demonstrated that there is effectively no particular way to organise and regulate supply linkages between farmers and their end customers in order to benefit farmers more than their end customers. Dairy case study farmers explained however that their

supply contracts specify certain food quality and safety requirements and demands that they must meet if their linkage with **Company A** is to continue. This demonstrates that **Company A** is able to, and does, control its farmer suppliers' production activities and marketing activity, and that the farmers that supply to them must conform with this to maintain the linkage between them. In addition to this, and in contrast with expectations of farmers during the 3rd Food Regime, the farmers expressed no real awareness of the dynamics of consumer demand and its relative impact on their production activities. Instead, they were happy to seek and obtain direction from their end customers. Ultimately, it was observed that this allows **Company A** to retain its position in the global food industry.

6.2.4 Supply Contracts

Farmers were asked for their opinions and perceptions of supply contracts in order to establish whether these farmers felt that supply contracts were as restrictive as the literature has suggested (see Commins 1990). In contrast with the literature, findings revealed that farmers were generally supportive of supply contracts. For example, the majority of dairy farmers were of the opinion that:

- contracts provide security for farmers;
- contracts facilitate autonomous working by farmers;
- contracts provide farmers with opportunities to manage their farms independently; and,
- contracts improve farmers' ability to make long term plans for their farms.

Such findings are, perhaps, unsurprising since they each currently use a supply contract with **Company A**. Since most of the livestock farmers had no personal experience of using supply contracts, they felt unable to comment on them. **Farmer E** is however a livestock farmer with no personal experience of using supply chain contracts, and he was of the opinion that contracts would facilitate easier medium term planning by farmers on their farms, and that this is a potential advantage over *ad hoc* supply linkages. **Farmer G**, also a livestock farmer, felt that the relatively short-term security offered by a contract is sufficient to benefit farmers. In

addition to this, another livestock farmer, **Farmer F** felt that contracts provide enhanced financial security, over and above more traditional ways of selling produce.

Farmers were also generally of the opinion that supply contracts can improve farmers' sense of security in the market place since they provide a means of assuring that their end produce can be sold. For example, **Farmer A** said:

I wouldn't say [contracts] *are a waste of the farmers' time and money, no...* [but] *I don't know if they do - reap better financial returns - it's* [more] *the security and knowing that you've got the market that's the important bit . . .* (Y)*ou need to know you've got a market for your milk before you ever, ploughed in any more money ...*

Not all farmers supported the use of supply contracts however. A small number of farmers also felt that supply contracts were not suitable for all types of farm production. For example, **Farmer E** suggested that more intensive production methods were more suited to the use of supply contracts than extensive types of production. He explained that extensive production makes it difficult to accurately plan when produce would be ready for sale and was, therefore, more suited to *ad hoc* approaches to marketing farm produce. He explained:

If you're relying on extensive, and not as high a level of environmental control, well no environmental control, then . . it's . . . difficult. It's an advantage in some respects, in that . . . the consumer perceives [contracts] *as a better way of producing stuff. But, it is very difficult to provide the consumer with the product, you know, on a regular basis. . .* [in] *the extensive livestock* [system] *where you can have delays in production, due to the weather, due to the grass season, etceteras . . .. . .* [I]*t's very difficult to accomplish in grassland based production . . .* [but] (i)*t's quite easy, I would have thought, with poultry, and relatively easy with pigs to get . . . production every week . . .* [because] *you have more control over management of the animal in your intensive systems...*

In addition, another livestock farmer made a decidedly negative comment about supply contracts; **Farmer N** stated unequivocally that, *"contracts are not worth the paper they are written on . . ."*. He explained that he was of this opinion because he had previously sold his sheep by contract to an abattoir. However, he had been concerned that he was not being given a competitive price for his stock, and the abattoir was unable and unwilling to explain why they had given him a price that was relatively low in his opinion. As a result of this experience, he had vowed never to sell by deadweight again. He therefore now sells all of his stock via livestock auction markets throughout Cumbria.

In addition to this, and rather philosophically, **Farmer O** suggested that consumer demands change so quickly that, today, farmers need a range of end market supply linkage opportunities to reduce risk of market failure. In view of this, he suggested that farmers might need to use a combination of supply contracts, including more *ad hoc* approaches to supply linkage management with their end markets. **Farmer E** made a similar comment in this regard, saying that, while contracts can work, they are not the only way to market farm produce and a variety of marketing channels should be made available to farmers by their end customers (e.g. abattoirs, food processors, MGRs, the food service sector). Existing accounts about the viability and competitiveness of farmers' end market supply linkages have not provided such a wide ranging discussion of the relative strengths of contracts over other forms of marketing. These findings highlight a need for more in-depth exploration of the use of supply contracts and versus other end market supply linkages.

To explore the possible use of a range of marketing arrangements a little further however, farmers were asked for their opinion of more collaborative end market supply arrangements, including marketing boards. Very few farmers felt that a marketing board would be better for farmers than a supply contract. For example, **Farmer E** argued:

... [T]*here's the question of whether individual farmers . . . can guarantee supplies, and . . . I think in most sectors it's not possible to guarantee. In that kind of set up, you have to have the flexibility in the market place. . . It's very difficult, because, for instance this last year . . . we had a very bad June, which has totally destabilised the marketing of lamb, and . . . a lot of lamb has been carried later into the year. So, currently, we have a serious over supply situation coupled with a very* [strong] *pound, which is making imports very attractive to retailers, and the retailers have switched to imported products . . . which has left the domestic market very weak indeed. So, at the moment, we have to use that weakness of prices to get ourselves back in to the market...*

He, thus, suggests that farmers in the UK need to be aware of global supply and demand, not simply domestic supply and demand, since this is a major factor that affects market dynamics, and ultimately farmers' marketing opportunities.

With further regard to more co-operative and collaborative supply linkages between farmers and their end customers, **Farmer A** argued:

. . . *A lot of farmers would like to revert back to the Milk Marketing Board days, if* [it had] *only been sharper, it would work . . . a lot better than us being down trodden right now...So. . . if you could have seen what was going to happen one way. . . it should never have been changed...*

In addition, there was also some concern within the sample that farmers would struggle to manage and serve a farmers' marketing co-operative, and that supply contracts and auctions were much easier to use in comparison. Reasons for such responses included **Farmer O's** suggestion that farmers' marketing boards would not be easy to manage for livestock farmers because of the variety of livestock types and qualities available from a lot of smaller producers. In addition, **Farmer F** suggested that farmers' marketing co-operatives were difficult to manage equitably and profitably because everyone needs to be satisfied, and this generally involves substantial negotiation that would never realistically resolve each member's demands. He explained:

It's no' very easy . . . because every farming co-operative is slightly different you know, and they've may be got different ways, and different stock of different size or whatever. That's what it is about farming - everybody's different! I mean, you do roughly the same as what your neighbour does . . . [but] *it's not exactly the same . . . it just depends on the way you're tied up, the way you are . . . where your* [main] *. . . market is ...* (W)*e're far too independent us farmers...* (W)*hen you get together, you're just trying to compromise; please everybody...that's the trouble, that's why co-operatives don't work* (**Farmer F).**

These findings reassert the highly individualistic approach to farm business management that this sample has demonstrated in answers to other questions (see above). The findings also challenge the currently popular notion that collaborative approaches to marketing are viable for farmers and this theme is addressed in more detail in section 6.4 below.

Still in response to the question of whether, and how, farmers felt that existing ways of supply linkage management were inappropriate, farmers expressed very little faith in food processors, MGRs, or the Government to organise and / or regulate the sale of farm produce for farmers' benefit. Indeed, a number of farmers, though they are currently involved in contracts with **Company A**, said that food processors use supply contracts to manipulate farmers generally. Other farmers suggested that MGRs use contracts to manipulate farmers. For example, **Farmer H** stated:

... Tesco's ... [have] *been telling the producers that they want such and such a quality, and then they went to Ireland and said, "We're short of forequarters", and then they brought that load in, and it wasn't forequarters, it was beef burgers like, wasn't it?...* (S)*o . . .you could say that some will use them like* (manipulative tools) *yeah...*

In addition, **Farmer A** stated:

...I think that they [the MGRs] *ought to be brought up in front of the Monopolies Commission...because they are ruling the price that we are paid . . .* [The MGRs] *are really in control. They're trying to set up contracts directly, like Marks and Spencer's do, but ... the contracts are worded such that they don't have to have that particular farmers' beef or whatever, and they can get it from somewhere else ... and they are. A lot of farmers are very, very wary. It would be all right if the contract said that they would take whatever the farmer had . . . of a certain quality; but they're not doing that. If it's cheaper in Ireland* [for example], *then they leave the farmer whose got the contract with them* [and] *they get* [it] *somewhere else . . .The supermarkets . . . are the lowest of the low, in my mind...*

Furthermore, **Farmer G** offered the following opinions about MGRs' use of supply contracts:

When the price is down, [retailers] *talk it down ... they do . . . I'm sure . . . all supermarkets are . . . getting' together and nippin' the farmers . . . That's why the price is poor . . .* (T)*here was a programme on TV . . . where this fella* [produced] *Brussels sprouts, and he was* contracted [to sell them for a set] *price to the supermarket. Now then, if he took his load into the supermarket . . . – even if there was a contract price – they would say, "Ooh, them are not up to scratch*", [and] *sent back . . .* [So] *whose to say they'll do it with beef? . . .You know, that's how it was on tele . . .. about all these contracts . . .* (I)*f you sent 20 beasts into . . an abattoir, what's to say that they'll say, "Them beasts are too dirty – send them back"? . . . And you've the haulage to pay, down there [and] to bring them back . . .*[and] *you know, they could just say that . . .*

Farmer G's comment captures some of the concerns recently voiced by many livestock farmers who had to sell their stock direct to abattoirs at a fixed price during FMD 2001 in the UK. It is also demonstrates how farmers can use the media to inform their opinions, perceptions and decision-making.

In sum, these findings about how supply linkages could be managed reveal that these farmers are generally dissatisfied with the way in which their supply linkages are organised and regulated by MGRs and food processors. In contrast, **Farmer L** explained:

... [I]*f . . .* **[Company G]** *was selling all my end product - I wouldn't have a problem with them, because they're a local business.. ... And they're well financed and everything - no problem. But when you're dealing with supermarkets . . . that's different ... I think that they . . . just see everything in terms of money; that's how I view supermarkets, they're thinking of the shareholders all the time.* [Whereas, **Company G** thinks] *. . . more about the customer 'cause they have to ... they won't survive if they don't think about them. And I think that's the difference between . . . the smaller retailer against the large supermarket chains . . .*

Taking this into account, it appears that supply linkages between this livestock farmer and a smaller, geographically proximate food processor is valuable for him. Section 6.4 considers the concept of such supply linkages between farmers and food processors in more detail.

Farmers were also asked to comment on the required improvements to the way in which supply linkages are organised and regulated to benefit farmers in particular. Responses revealed a substantial lack of faith in the (Labour) Government of the time to bring about meaningful and positive change for farmers in this respect. For example, **Farmer A** stated, " *I have no confidence whatsoever in the present government*!". In some contrast, **Farmer G** suggested that while farmers currently get low returns, and consumers are overcharged for food, food processors and MGRs seem to profit. This led him to reason that Government could help farmers by investigating food processors' and MGRs' business practices. Other farmers suggested there was no role whatsoever for Government in the AFS, expressing preference for a more liberal market. They felt that this would enable efficient and effective organisation and regulation of farm produce marketing. For example, **Farmer O** explained:

I think it's . . . down to the market really, isn't it? I think we should be left to get on with it, really . . . I mean, the government should be monitoring it to make sure [it isn't corrupted]... *there's got to be some sort of* [regulation]...

Referring to the way that quality assurance schemes to meet consumer demands increasingly determine how farmers produce and sell their produce, **Farmer M** suggested that consumer demand is able to manipulate farmers. Such comments demonstrate that these farmers feel that consumer demands affect them directly. This has been suggested elsewhere in accounts of the MSR of the 3rd Food Regime (see Ilbery and Bowler 1998). It also shows that this farmer is aware of what affects their operations, but feels unable to change their own circumstances. Following the BSE crisis of 1996, livestock farmers did feel that livestock auctions and abattoirs should manage supply linkages between farmers and their end markets. The sample considered this to be a viable, appropriate and necessary approach since, in theory, they felt it would reduce the number of middlemen involved in the sale of farm produce, and therefore potentially improve farmers' net incomes. **Farmer N** also suggested that, amid growing pressure for the closure of livestock auctions in the UK, this might be a way to strategically reposition them in the UK AFS red meat sector. He was passionate about the retention of livestock auction markets in the UK as a means of maintaining efficient and effective supply linkages between farmers and their end markets, asserting:

*We **must** keep our fat stock auction markets . . . if we lose them . . .* [British farmers] *have had it!* ... (Emphasis in interview).

6.3 The Relationships between the Farm Enterprises and North Cumbria

Existing literature suggests that to ensure business continuity, farmers are more dependent on capital intensive supply linkages than the location that they farm in. It also reports that the biophysical environment determines agricultural production, and that the biophysical environment differs widely across the globe. To explore whether, how and to what extent their location affects the continuity of the case study farmers' enterprises, the sample was asked about their current use of resources that are available in North Cumbria, which support their production and marketing activities.

All of the dairy and livestock farmers that were interviewed currently sell their produce to food processors (**Company A** and **Company G** respectively) that are located within North Cumbria. While the dairy farmers are contractually bound to supply their milk to **Company A**, the livestock farmers have only *ad hoc* arrangements with **Company G,** via livestock auction markets in Cumbria where they can potentially sell their produce to a number of possible end customers. The farmer case studies are therefore dependent on geographically proximate end markets to sell their produce (more details about this are provided in section 6.2).

The farmer sample was asked additional questions[50] about the wider role or influence that their location (and the resources available within it) plays in their enterprises. First of all, like the food processor samples, the farmer case studies were asked for their thoughts about the use of regional or location name branding of produce. A number of dairy farmers supported this concept on the basis of the prevailing need to certify the quality of produce sold in the UK AFS. For example, **Farmer A** explained:

[50] See Appendix 9.

[It would not] *do any harm; especially if . . there were some* (products) *that said, 'Filthy, dirty milk from . . .* [x]*' . . . Y'know - it ought to be in great big letters . . . especially if it said something like, 'Produced in Cumbria to BS Standard soandso, soandso' . . . or.. 'Milk of exceptionally high quality' . . . I'm all in favour of* [labelling agricultural produce with its place of origin]*... It was on the news that the European Commission are wishing to have beef labelled as hormonally treated if it comes from America, and a few other places where it is hormonally treated - and I'm all for it. . .* [For example] *'Beef of Dubious Origin . . . !!!'... Heh-heh!!*

Farmer I and his son were also particularly vociferous about the use of the place of origin to help sell more produce because consumers relate their (unique tourism based) perspectives and idealistic images of places to the produce when they see the place name. They said:

Farmer I: *I think....these local products seem to...*
Farmer I (junior): *..Sell well. We heard talk of a dairy* [selling milk] *as Eden Food; produced in Eden by Eden producers, to be sold in Eden...* [Food consumers] *see this area and think it's a nice area . . .* [and that] *the produce is healthy ...*
Farmer I: *Yes, that's right...*
Farmer I (junior): [It's all a result of]*. . .* (y)*ou know, the right marketing...*

Another two farmers, however, considered it unlikely that **Company A** would use regional branding since they already have globally renowned brand names. In sum of these findings specifically however, most farmers felt that marketing a product with a message about its origins helps to sell produce. For example, **Farmer F** said:

Aye. . . Scottish Beef seems to be making a wee bit more than English [at present]... [because consumers] *think of Scotland; they think of their holidays; they think of countryside; they think of rolling hills and grass; and highland cattle . . . So, aye...*

Farmer H also suggested:

I think . . . [you] *probably could get some advantage* [from using regional branding]*. I mean, Scottish Beef, for example . . .'Angus Steaks' and the likes...*[are] *more marketable than* [other steaks]*. . .*

It therefore appears that the case study dairy farmers are aware of the potential opportunities and reasons for using regional branding as a means to improve consumer demand for produce that is of a certified quality and portrays a particular image. It is, however, also evident that these farmers consider that such messages can be false advertisements to some extent, since

the location of production would not necessarily affect (improve) the quality of milk delivered to the food consumer. Indeed, a number of farmers stressed that the quality of produce is dependent on the individual producer and their management of production in accordance with end customer's (**Company A's**) demands.

In contrast, the livestock farmer case studies were largely supportive of the use of regional branding as a way to help sell produce that is perceived to be of a higher quality. For example, only **Farmer O** expressed concerns that such an initiative would not be of long term benefit to livestock farmers. He explained:

...It's a niche market really isn't it? It's quite a small scale isn't it? I expect [it would work] . . . *if it wasn't going to cost too much to set up* [and] *there was a demand for it . . . If . . .* [**Company G**] *wanted it, then we . . .* (p)*robably would* [get involved] *- yeah. The trouble is with these schemes is it costs that much to join them...* (**Farmer O**).

Linked to this, **Farmer E** explained how **Company G** had historically used place-based marketing:

...[**Company G**] *did pursue* [a regional branding scheme] . . . *sending products to Hong Kong . . . There was a scheme developed . . . to market the lambs from this immediate area into London* [and Hong Kong]. *But it . . . came up against problems . . .* [linked to] *competitiveness and cost...* (**Farmer E**).

In view of this, he suggested:

. . . [Regional branding could be] *reasonably useful, supporting local butchers rather than large scale* [supermarkets] . . . [But] (i)*t's very much a niche market situation, and I'm not sure about niche marketing initiatives ... they don't get us much further forward . . . It's very nice for those who are in a niche, but they usually achieve a premium by denigrating everybody else . . . outside of the niche . . .I don't think it takes the whole industry forward at all . . . It's dissipating energy; competing amongst ourselves rather than taking the whole sector forward. I think that it* [creates] . . . *a division* [in] . . . *the industry... Rather than getting more strength through unity, it's actually dividing the industry and weakening* [the farmers' position] *in the long run because we will start competing with one another . . .* (I)*t doesn't solve any of the problems fundamentally. . .* (**Farmer E**).

In contrast, **Farmer L** considered that regional branding has become a successful marketing tool for farmers because of recent changes to the way in which the UK AFS is organised and regulated, not due to product quality or changes in consumer demand.

(B)*randing's a big thing. I don't know why... I wouldn't say that . . . consumers have asked for it, it's just that supermarkets have decided that* [they want it] . . . *I'm very cynical about these things . . .* (and, i)*f you want me to speak bluntly, I don't think it's anything to do with consumer demands; I think it's what supermarkets manipulate the consumer to buy. . .* [Grocery] *retailing now is all about branding things. . . not just in this country, but in Europe as well, they're wanting more and more produce . . . that actually comes from a certain area. . .* [For example,] *'Scotch Beef' . . .* [is] *a big brand name now* [and] *. . . I know that in France there are certain supermarket chains* [that] *would like to source* [lamb] *from Scotland. . . So, they'll have Scotch Lamb... So, you know . . .* [there are] *opportunities there . . . if we find a market and take the opportunity...* (**Farmer L**).

In addition to this, **Farmer G** asserted:

Any way to sell your beef [would be considered now]. . . *We've got Scotch beef – what's the matter* [with] *Cumbria beef? Lovely beef . . . High quality produce . . . I've gone all around – tryin' to buy beef* [cattle] *and you can not buy better beef than in Cumbria . . . Cumbria beef is best* [by] *miles . . .*

The case study livestock farmers thus generally appear to perceive regional branding of red meat to be a way to improve farmers' market returns because consumers prefer branded, as opposed to generic, produce and this approach is widely used across the UK AFS. In the literature, such approaches are considered to be characteristic of accounts of the MSR of the 3rd Food Regime (for example, see Atkins and Bowler 2001).

Finally in this section, as detailed in Section 6.2, farmers explained that they are generally reliant upon local sources of information about end market opportunities. The farmer sample is dependent on specific local actors for information that supports their day-to-day operations and ultimately therefore their farm enterprise and no farmers expressed a wish to change this situation. Linkages and relationships between farmers, other farmers, and service and information providers in North Cumbria appear to be essential to these farmers' existence and continuity.

6.4 Hypothetical Agro-food Information and Product Exchange / Supply Networks in North Cumbria

This section of the chapter describes each farmer's perceptions of the viability of a hypothetical agro-food product and information supply / exchange network between farmers and food processors in Northern Cumbria. The relevance and suitability of this currently extremely popular model of economic development to the UK AFS has not previously been explored from the farmers' perspective.

6.4.1 Regional Agro-Food Product Supply Networks

First of all, farmers were asked about their potential to use a hypothetical agro-food product supply network between farmers and food processors in North Cumbria. Findings reveal that, largely due to concerns about the ineffectiveness of marketing boards historically, and a lack of understanding about how a regional produce supply network would be organised and regulated, the majority of case study dairy and livestock farmers would be unwilling to use such a product supply network. Instead, they expressed a preference for retention of their current end market supply linkages.

The reasons for such responses were based on concerns about a variety of issues. First of all, farmers were concerned that the possible financial cost of using such a network would be too high, explaining that co-operative based supply linkages rarely deliver prompt and competitive payment to suppliers that use them. For example, **Farmer H** explained:

... [there could be] *a lot of money sitting* [in the form of processed products]. *So, I prefer my products to be sold* [in the way they are at present]... *and I don't really see that changing a lot.*

Such a finding illustrates that these farmers would not be supportive of more collaborative marketing linkages, which are being suggested as the way forward for UK food and farming post FMD 2001 (see Policy Commission 2002).

Farmers also felt that such a supply network would simply seek to market its stock and not proactively seek the best markets for the produce. Linked to this, farmers were concerned that

co-operative based supply linkages may lack economies of scale and not be able to meet market demand and therefore may not provide regular marketing and income earning opportunities. These findings demonstrate that the case study farmers actively seek to meet end market demands.

In addition, still in relation to the concept of co-operative approaches to marketing farmers' end produce, **Farmer F** exclaimed:

There's no way in the bloody world that it'll work **[for livestock]!** *. . . I'll tell you something, it wouldn't work . . . No. No way in the world being realistic, it'll never . . . I'd like someone else to try it . . . some outside farmer to try and make a living of the . . . thing! But, it's impossible as far as sheep and beef's concerned. I mean we've been screwed down to I don't know what . . . it's really disappointing... And the most disappointing thing is that, even if you do enjoy doing your job, which most farmers do enjoy doing their job, there's still little money* [available from] *doing it ...* [It's] *probably better staying in bed!! . . .* (T)*he rest of the other farming sectors are the same - its difficult. You don't know where the hell to hit the ball . . .* [But] *I think your idea's right enough in future; if we get through this worst stretch of problems now, it could work, aye. . . It's* [beginning to] *work that way now in the beef* [market] - *we're being controlled by the folk that's buying it, . . . i.e., the housewife buying the product* [Emphasis by interviewee].

It was also suggested that extensive farming systems could supply high quality produce, but cannot satisfy MGRs' demands for large quantities of produce at certain times of the year. With regard to this issue, **Farmer E** explained:

It's just . . . one of those problems that's very difficult to sort out because . . . the retail sector wants a regular supplier, and it's difficult for any part of the country, particularly in sheep, to have a regionally based organisation that can supply all the year round . . . (W)*e extensive farmers have to play to the other end* (of the market), *you know the quality end, because it's* [a] *higher* cost [production system] *anyway, and . . . structural problems are also contributing* [our costs] . . .

In sum of these findings, the sample as a whole had generally negative views of a hypothetical regional product supply network between farmers and food processors in Northern Cumbria. Some livestock farmers however voiced in principle support for such a supply network. In particular **Farmer L** considered:

You can only do it from a position of strength . . . (P)*roven that it was working, and that we were having a definite effect on the end product, and that we could have that, and guarantee of our* [income] *. . . I would go along with that, yeah. . . You've got to be able to trust* [someone] *. . .* [T]*here's got to come a time when . . . the whole thing'll break down if there isn't some* ***trust*** *between . . . each end of the line...*

Support for such a hypothetical mode of end market supply was however minimal. To contribute to an understanding of these farmers' general willingness to work with other farmers and with food processors in the same region, the case study farmers were subsequently asked about their potential use of a hypothetical agro-food information exchange network between farmers and food processors in North Cumbria.

6.4.2 Regional Agro-Food Information Exchange Networks

The number of positive responses to this question from dairy farmers contrasted starkly with the lack of support from livestock farmers, emphasising their preference for use of locally procured information to support their operations. Dairy farmers gave the following responses about why they would be supportive of a local information exchange network between farmers and food processors in Northern Cumbria:

- It could help improve farmer collaboration, and collaboration in the supply chain is necessary to improve the overall competitive advantage of that supply chain and income for those involved. It would however be necessary to keep the cost of using such a network to a minimal to make it efficient for those involved in it.
- It could improve the management of supply linkages between farmers and food processors by making linkages between them more direct and explicit.
- It could improve access to a wider range and variety of information to improve their ability to manage their supply chains more independently, effectively and efficiently.
- It would increase the risk of loss of independence, but would also possibly reduce farmers' risk of loss of market opportunity. **Farmer D** explained, "... *that's the price you pay for less risk*".

Livestock farmers however generally did not support the potential establishment of such a hypothetical network. In contrast, **Farmer G** was supportive of it, since he perceived it to be a means by which farmers could secure relevant information about the different end markets

that they could potentially supply with their produce. He explained that he felt that such information would benefit farmers and food consumers directly. He also explained that he currently uses livestock auction markets for this reason:

...it's no good me producing what I think, if [my end customers] . . . *don't want it . . . You have to produce what they want . . . That's it! Full stop!... The market demands . . .what's wanted...* [and] *you know what folk wants* [through speaking to them at market]. *So, if you don't listen to your wholesalers, or you don't listen to your butchers – you haven't any chance! You've got to watch* [the market] *and . . . try and produce what* [they] *want...* (**Farmer G**).

Additional responses to this question, given by livestock farmers that generally indicated a lack of support for such a network, were:

- The auction currently provides this type of service for livestock farmers and farmers can access information as and when required. Therefore, there is no need for an additional, identical, service to be established, but the service itself is a valuable one.
- There are very few food processors in the local area that would be able to provide appropriate information for such a network that is not already supplied by butchers at the local auction.
- Livestock farmers would generally prefer to maintain their independent approach to securing appropriate information for their particular production activities.

Support for a hypothetical information exchange network between farmers and food processors in North Cumbria was therefore minimal amongst these case study farmers. The sample was subsequently asked for their opinion of how to manage such a network, to ensure that it ran smoothly. They were also asked how they felt that such a network could be managed so as to benefit small and large farmers and food processors and contribute to the development of a competitive and AFS in the region. The findings from these questions are detailed below in 6.4.3.

6.4.3 The Management of a Regional Agro-Food Supply Network

Farmers were generally of the opinion that they could not begin to imagine how such a network could be managed to ensure it ran smoothly. As noted in Chapter 3, to develop a robust theory, it is important to analyse negative responses to questions as well as positive responses. Such responses are therefore discussed here. Further investigation revealed that some dairy farmers were simply of the opinion that the most viable and appropriate way to manage such a network would be to use a development agency that would provide easy access to specialist and specific management skills and expertise. Such a response demonstrates that these dairy farmers understand that marketing agro-food commodities at the current time is a skill that is related to, but not necessarily achieved by, producing high quality produce alone. Rather, there is a need for personnel with particular skills and knowledge to manage it competitively with a good awareness of the commercial opportunities and threats in the end market.

In contrast with the dairy farmers, none of the livestock farmers considered development agencies to be potentially appropriate managers of such a network. Various reasons were given to explain why. For example:

- Livestock auction markets currently have contact with groups of farmers and customers and, therefore, the best way to deliver such a service is through the livestock auction market.
- Livestock auction markets act independently of the farmer and the end customer; they are simply the channel through which produce is sold. There are therefor no competitive power relations between the marketing channel, the producer, and the end customer at the auction market.
- A variety of end customers with a variety of demands attend auctions. Therefore there is a virtual guarantee that produce can be sold there, regardless of the quantity and quality of produce available.
- The livestock auction market company has the relevant and necessary knowledge about the end market and the supply base for livestock to serve both sides of such a network.
- Past experience of using the auction is positive, and farmers generally trust the auction market to perform in a fair manner.

- Livestock auction markets are the most conventional and appropriate local venue / channel through which to market livestock and deadweight marketing is generally an undesirable alternative.

- The livestock auction market company that is used by **Farmer L** is currently trying to develop more formal linkages between local farmers and food processors. **Farmer L** explained:

. . . *I would love us to see the auction* [managing such a network] . . . (Y)*our local auction mart could act as the agent for all that produce to be taken there as a collection point, to be passed on to the processor; and it could be stamped as 'Eden Valley Food', you see - or whatever you wanted to* [brand] . . . *it. But I think you could source it better . . . if you had the contracts with all your customers through that auction mart . . . You don't get people then, coming in from all arts and parts, and bringing stuff to that auction to sell. You are a definitive area . . .* (W)*hat* [farmers] *want to do is . . . cut out as much in between* [us and the end retailer] *as we can, so that, you know, our profitability's better...*

In addition to the above, **Farmer E** suggested that there are existing organisations that provide such information:

. . . *I think* [information about] *the conditions of production, etceteras, should be handled through organisations more like FABBL . . . In other words, that we sign up to certain standards . . .* [and] (i)*f government isn't willing to* [provide that system], *then the only alternative really is to operate with organisations such as FABBL,* [and other] *assurance organisations . . . In other words, attach yourself to a ... laid down standard . . . that has been defined, and that allows the market to continue to operate...* (**Farmer E**).

This comment supports previous discussion (in section 6.3) about how support and advice for farmers in such a network should be provided by those individuals and groups with relevant experience and interest in the development of farming and the AFS more widely. This would not necessarily be only those directly involved in food production and marketing. It also highlights that farmers need to be responsive to consumer demand and that the management of such a network would need to be aware of, and respond to, that need. In sum, **Farmer E** stated:

[It's a] *challenge to anybody who takes that role . . . they're only going to be successful and continue if they reconcile the both sides . . . the forces* [of supply and demand] *still have to be reconciled somewhere or other...*(A)*t the moment in this area it would be the auction markets, in other* [geographical] *areas it would be a group, or a number of groups...*[for example] *'North Country Primestock'*[51]*, or something like that . . .*(t)*hat provides* [the] *. . . forum to reconcile the forces . . .*[in a] *fairly flexible* (manner), *you know. But when you think about the auction situation, they're basically producer groups, although they have no formal . . . contracts between the producers and the organisation, they depend upon regular supplies from their producers to justify themselves. But* [that's the] *reconciliation point* [where] *the other side is willing to let the other side have control . . .* [That is to say,] *one side wants to control it, both sides want to control it. You know, farmers would like to control supplies, and the retailers would like to control supplies as well . . .* [but] *I think that the retailers have virtually got the control of supplies* [in some sectors] *in that they are fully contracted . . . suppliers...*

A number of dairy and livestock farmers also suggested that farmers themselves would be appropriate managers of such a network. Reasons why are given below in Figure 6.2. In broad reflection of the key messages in Figure 6.2, **Farmer L** (a livestock farmer) explained:

(T)*here's plenty of middlemen . . . I think that the more that we do between ourselves and retailers, and keep, y'know, keep the thing to ourselves* [it would be better]. *As I said before,* [the] *auction mart is our agent,* [our] *. . . go-between. If* [farmers] *could . . . you know - all group together and contact each other a lot more, it'll be a lot better for us all . . .* [We] *don't need a lot more people giving us advice and such like . . . We don't need that, because all we need to know is what the consumer demands, or even* [what retailers] *would like to sell, or try and sell and to have that, you know,* [on an] *ongoing* [basis] . . .

Figure 6.2 Why Farmers Should Manage Agro-Food Networks in North Cumbria

Dairy Farmers	Livestock Farmers
• Farmers and food processors need to interact more with one another to achieve effective and efficient produce marketing and using middlemen would detract from this. • Farmers need to take a more proactive approach to managing marketing supply linkages commercially and in accordance with end market demands and this would facilitate that	• Most livestock farmers would generally prefer to maintain direct linkages with end customer rather than use middlemen.

[51] 'North Country Primestock' is a beef and livestock producer collective organisation that was set up by farmers in Northumberland in an attempt to secure better returns from the sale of their produce.

It is apparent from the above that the case study farmers felt that the systems that they currently use would be appropriate systems for the management of a hypothetical information exchange and produce supply network between farmers and food processors in North Cumbria.

Managing such a network to ensure equal opportunities for all farmers and food processors, so as not to disadvantage small farmers and food processors in particular, revealed other issues of concern to the case study farmers. For example, respondents generally felt that managers of such a network should:

- Have previous experience of and trust in organising / managing a supply network / grouping.
- Be able to provide a range of relevant information and advice for those in the network. (Y)*ou could argue that the smaller farmers* [are going to] *get more benefit from joining together* [anyway]...*I mean, they could try and plan things between themselves better* ...[But also] *if everybody...gets the same information at the same time...the small* [farmers] *shouldn't be more disadvantaged* [than larger farmers]... **(Farmer F).**
- Be active in the North Cumbrian / farming community at present.
- Be able to protect and support farmers in particular.
- Be independent of those involved in the network.

Some different participants may therefore be required in this instance. Table 6.2 below summarises which organisations were seen to possess the relevant attributes to manage such a network and the remainder of this section provides a brief explanation of these findings.

Table 6.2 Management Attributes for an Agro-Food Network

Management Attributes	The RDC	MAFF	NFU/ SNFU	Development Agencies
Previous experience of the organisation and trust them	×	×	✓	×
The organisation has the relevant experience and/ or knowledge	✓	✓	✓	✓
The organisation is currently active in the local area's AFS/ agricultural community	✓	✓	✓	×
The organisation provides a range of relevant information and advice for farmers and the AFS	✓	✓	✓	✓
The organisation has traditionally played a regulatory role in the AFS and farming industry	×	✓	×	×
The organisation would protect and support farmers in particular	×	✓	✓	×
The organisation is independent of those involved in the network and would be unbiased	✓	×	×	✓
The organisation would provide a more (necessarily) commercial and therefore competitive approach to network management	×	×	×	✓

The findings demonstrate differing levels of support for intervention in the management of such a network by some of the most high profile institutions active in agro-food and rural development at the time the interviews were undertaken. Those institutions were the RDC[52], the Scottish Agricultural College, MAFF (now DEFRA), and the NFU or independent development agencies[53]. For example, a number of dairy farmers considered MAFF (now DEFRA) to have the appropriate breadth and depth of knowledge to support such a network. It was also considered by dairy farmers that MAFF (renamed DEFRA in June 2001) has sufficient political influence over actors in, or using, such a network to be able to manage it

[52] The Rural Development Commission (RDC) was dissolved on 1st April 1999 with its work remit consequently being transferred to the Countryside Agency and the respective Regional Development Agencies in England.
[53] For example, Business Link.

effectively, from a remote position. This was generally the opinion of farmers who used MAFF as a source of advice and information to support their enterprise at the time of the interviews. Those who felt that MAFF would need to participate in such an initiative (dairy and livestock farmers) explained that they did so because MAFF has always been active in this area of the UK AFS. However, some dairy farmers expressed concern that using MAFF would simply increase the cost of participation in such a network. **Farmer A** asserted:

MAFF would have to stick their oar in, 'cause they always do.. . . [and the] *NFU, well they work on our behalf...*

In addition to this, **Farmer G** asserted:

Well, I pay me NFU subscription. So, you know, you might as well make them work for it. Aye... Absolutely .

Some livestock and dairy farmers also expressed their trust in and experience of working with the NFU and considered them to be able to manage such a network to ensure equal distribution of opportunities within and across it. In addition, one livestock farmer considered that having the NFU manage such a network would protect farmers using it. There was however a variety of opinion about whether MAFF or the NFU should manage such a network. In sum, **Farmer O** suggested:

I suppose you'd expect something may be, possibly, from the NFU, but they wouldn't necessarily want to be involved with that type of thing. . . they'd probably encourage it, but they wouldn't be wanting to [put their names against it, and] . . . *I suppose you might want MAFF ...*

These comments suggest a lack of faith or trust in MAFF and the NFU and a sense that some farmers see them as being relatively unable to influence the contemporary AFS[54]. Livestock farmers in particular asserted their lack of trust in the British Government to provide appropriate and sufficient support for the development of their enterprises in the future.

Reflecting on the RDC's possible role in managing such a network, some dairy and livestock farmers considered it to be an appropriate management body since it was created to provide advice, guidance and support for rural development (including agricultural development). One livestock farmer in particular explained that he had positive, personal experience of working with the RDC[55] and that made him confident about their ability to provide useful and constructive support and assistance to farmers.

Dairy and livestock farmers also voiced some support for development agencies as providers of impartial, accurate and appropriate advice and information to such a network to prevent inequality amongst its participants. Dairy farmers were however the only ones able to speak from past experience, since no livestock farmers had any experience of using development service and support providers such as, for example, Business Link.

Interviews with the sample of farmers also revealed that there was no support for food processors or farmers to manage such a network. What is more, a number of farmers suggested that smaller farmers might not be willing or able to participate in such a network. Finally in this regard however, **Farmer J** suggested,

. . . *with all these* [managers], *I think you're gonna have a lot more people employed – and everybody's to pay... The cost of its* [going to] . . . *jigger it up for a start off!... The less people you have involved, may be, the better!*

Such comment draws attention to the possibility that there is no need for a specific management body to formally regulate activity in such a hypothetical network.

6.5 Summary

This section considers the key findings discussed in this chapter in relation to the study's objectives. The chapter had three aims, each of which related to the research objectives.

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[54] They are however key partners in the Red Meat Industry Forum that was created to oversee and direct the strategic restructuring of the red meat industry in the UK post FMD.

[55] The local auction company is developing a local branding scheme and at the time of the interview was seeking funding support and advice from the RDC.

- First of all, the chapter aimed to establish how and why these farm enterprises came to be established and how they have developed. This was done in section 6.2.

- Secondly, the chapter sought to develop an understanding of whether, how and why the farmers relate to their end customers in the region that they are located in. This was done in section 6.3.

- Finally, the chapter sought to determine the farm enterprise sample's perceptions and opinions of the notion of a hypothetical regional agro-food produce and information supply network. Section 6.4 describes the sample's response to these questions with specific regard to their relative willingness to be involved in, or to use, such a network. It also describes their opinions about the most appropriate way to manage such a hypothetical product and / or supply network between farmers and food processors in North Cumbria.

First of all, the findings suggest that the farmer case studies generally pursued enterprise development as detailed in accounts of the MSRs of the 2nd Food Regime and Fordism. For example, individual enterprises concentrated on the production and marketing of one commodity, were either medium or large in size, and were generally expansion oriented. Findings also suggest that these farmers have historically applied capital rather intensively. These farmers were however also market demand oriented, and keen to engage in direct communication exchanges with their end customers. These characteristics indicate an approach not unlike that detailed in accounts of the MSRs of the 3rd Food Regime and post-Fordism.

Secondly, because the case study farmers sought to, and actually did, maintain close and direct relationships with their end customers, who are located in the region. Their relationships with, and use of resources from within, North Cumbria were however generally limited to end market supply linkages with food processors. For example, none of the farmers were particularly in favour of regional branding as a way to enhance the prospects for themselves or the local AFS more generally. This finding contrasts with policy recommendations about how farmers could, and should, now seek to develop and operate their businesses.

In addition to this, findings revealed that these farmers were willing to forge close links with their existing end customers rather than being involved in a regional agro-food produce supply

network. The farmers had their own opinions of the best way to manage their businesses, but their end customers' demands ultimately influenced how they manage their activities and supply linkages. On that basis, they were unwilling to engage in a more general relationship with the end market, and the farmers sensed that that would be how a hypothetical regional agro-food produce supply network would function.

On the other hand though, most farmers supported the idea of a hypothetical regional agro-food information supply and exchange network. Dairy farmers suggested that development agencies or consultants would be the most appropriate managers of such a network, and the livestock farmers suggested that livestock auction markets should be involved in, or manage, such a network. Generally, dairy and livestock farmers had doubts about the capacity of traditional UK farming support service providers / institutions to manage such a network.

This section has summarised how this chapter relates to the research objectives. The chapter as a whole contains a number of key findings in relation to details in the conceptual framework. These key findings are synthesised in Chapter 7 alongside those from the MSFP and SME food processor case studies (presented in Chapters 4 and 5 respectively).

Part 3

Synthesis and Conclusion

Chapter 7

A Synthesis of the Research Findings

7.1 Introduction

This chapter aims to synthesise the key findings detailed in Chapters 4 – 6 to demonstrate how and why they relate to the research objectives and hypotheses (see Chapters 2 and 3). To do this, the chapter reiterates some of the details in Chapters 4 – 6.

7.1.1 Research Objectives

The conceptual framework in Chapter 2 was developed from a review of economic geography, political economy of the agro-food system, and rural studies literatures. The core themes within the conceptual framework are the RT approach to understanding governance and regulation; the concepts of the region, and regional development; regimes of accumulation under advanced capitalism; and the 2nd and 3rd Food Regimes. Chapter 2 closes with a statement of the six research hypotheses that were developed from that literature review, which were used to guide data collection and analysis in Chapters 4 - 6. Table 7.1 illustrates how the four research objectives are related to the six research hypotheses. It also demonstrates how these relate to the key categories of findings from the MSFP, SME food processor, and farmer case studies in chapters 4 - 6.

Table 7.1 Relating the Key Findings to the Research Objectives

Research Objectives (RO1)	Research Hypotheses (H1 – H3)	Core themes in the conceptual framework	Categories in Findings Chapters
RO1: To explore the concepts of regimes of accumulation under advanced capitalism in the context of the UK AFS, with particular reference to the notion of Food Regimes and the 3rd Food Regime in terms of actual food processor and farmer experiences.	**H1:** It is hypothesised that, if existing theory has accurately captured the nature and form of food processor and farmer enterprise development between 1947 – the 1980s, empirical findings about the historical development of farmers' and food processors' enterprises in North Cumbria should present characteristics of the MSRs of Fordism and the 2nd Food Regime (see Chapter 2). **H2:** It is hypothesised that, if existing theory accurately captures the nature of actual food processor and farmer development between the 1980s - 2001, the empirical findings should present characteristics of the MSRs of post-Fordism and the 3rd Food Regime (see Chapter 2). **H3**: It is hypothesised that, if existing theory is accurate, the State, MGRs and food consumers would be the principal influences on actual food processors' and farmers' approaches to supply linkage organisation and regulation since the 1980s.	• Regimes of accumulation under advanced capitalism • Food Regimes	• Case study food processors' and farmers' company existence and development. • Influences on, and approaches to, case study food processors' and farmers' supply linkage organisation and regulation.

Continued overleaf...

Table 7.1 Relating the Key Findings to the Research Objectives (...Continued)

Research Objectives (RO2 – RO3)	Research Hypotheses (H4 – H5)	Core themes in the conceptual framework	Categories in Findings Chapters
RO2: To investigate how a sample of food processors and farmers currently relate to and use resources from within the region in which they are located to assist with business continuity and management.	**H4:** It is hypothesised that an investigation of the relationships between food processors and farmers in North Cumbria and the region in which they are located will enhance understanding of how the region is used by food processors and farmers in the UK AFS at the present time.	• The region and models of regional supply linkage and economic development	• Case study food processors' and farmers' current relationships with the region in which they are located.
RO3: To investigate a sample of food processors' and farmers' personal perceptions of the potential viability of a hypothetical regional supply network model in the UK AFS.	**H5:** It is hypothesised that in-depth investigation of food processors' and farmers' perspectives on the use of a hypothetical regional agro-food produce and information supply network would provide novel insights and deeper understanding of whether its could be a means to stimulate competitive development in the UK AFS. It would also extend RT based understandings of how and why the region is used by the AFS specifically.	• The region and models of regional supply linkage and economic development	• Case study food processors' and farmers' perceptions of the viability of a hypothetical regional AFS supply network between food processors and farmers in North Cumbria.

Continued overleaf...

Table 7.1 Relating the Key Findings to the Research Objectives (...Continued.)

Research Objectives (RO4)	Research Hypotheses (H6)	Core themes in the conceptual framework	Categories in Findings Chapters
RO4: To compare theories about who or what has the ability to influence how supply linkages are organised and regulated in the UK AFS (who has power in the UK AFS) by comparing empirical evidence from a sample of food processors and farmers with existing theory.	**H6:** It is hypothesised that, evidence collected and analysed for the above hypotheses would develop a deeper understanding about the nature, type, form and existence of power relations in the UK AFS.	• Regulation Theory	• Case study food processors' and farmers' perceptions and experiences of power relations between different actors in the UK AFS specifically in terms of supply linkage organisation and regulation

As noted above, this chapter discusses what the above analytical framework has revealed in terms of the supply linkages and power relations between and within the sample of MSFPs, SME food processors, and dairy and livestock farmers. First of all the concept of regimes of accumulation under advanced capitalism are considered. This section describes the key findings that reveal how the case study sample's experiences of enterprise establishment and development, and supply linkage organisation and regulation compare with accounts of the MSRs of the 2nd and 3rd Food Regimes. Then, the findings that relate to the nature and type of relationships that exist between the case study sample and the region in which they are located are discussed. In this section, particular attention is paid to how the case study sample's experiences compare with accounts of how regional supply network models function. Finally, the chapter closes with reflections on the key findings about the power relations that characterise and impact on the organisation and regulation of the case study sample's supply linkages, comparing them with accounts of prevailing power relations in the UK AFS more generally.

7.2 Findings that Relate to Advanced Capitalist Regimes of Accumulation

The first research objective was to explore concepts of regimes of accumulation under advanced capitalism in the context of the UK AFS, with particular reference to the notion of Food Regimes and the 3rd Food Regime in particular as well as actual food processor and farmer experiences in North Cumbria.

7.2.1 Company Establishment and Development: 1947 – late 1970s

Bryson and Henry (2001) and Holly (1996) have reported that one of the most notable features of Fordism is that, under Fordism, economic development was concentrated around oligopolistic, large scale manufacturing enterprises. Such enterprises were involved in intensive merger and acquisition activity, and, within them, technical management was separated from blue-collar workers involved in the production of large batches of standardised products for mass consumption. It has been suggested that the 2nd Food Regime prevailed at a similar time to Fordism - between the 1920s and the 1980s (see Ilbery and Bowler 1998). Accounts of the MSR of the 2nd Food Regime suggest that food processors and farmers undertook a broadly similar approach to company development, informed by the structures and activities developed by the State and subsequently by

MGRs. For ease of reference, the term 2nd Food Regime will be used in the remainder of this chapter where the organisation and regulation of the food processors' and farmers' supply linkages between 1947 and the 1980s are discussed.

Key findings about the food processor and farmer case studies' approaches to enterprise establishment and development between 1947 – late 1980s do not wholly reflect accounts of the MSR of what has been referred to as the 2nd Food Regime. Two of the MSFPs and two farmers, for which there was available data, did demonstrate Fordist and 2nd Food Regime like approaches to enterprise establishment and development, but the SME food processors pursued very different approaches to business development.

To elaborate upon this, empirical findings from interviews with the case study food processors revealed that **Company A** and **Company B** had been involved in intensive global merger and acquisition activity during the 2nd Food Regime. Both **Company A** and **Company B** pursued this approach to enterprise development and expansion in order to gain economies of scale and access to greater shares of the global food market. Their sites in North Cumbria were established as a result of this intensive merger, acquisition, and enterprise expansion activity. In contrast, **Company C** was not involved in intensive, global merger and acquisition activity at this time. Rather, they developed the scale of their enterprise and the scope and variety of their food processing activities primarily in response to the demands of one principal end customer in the UK. Thus, they developed their enterprise around a specific target market. Such an approach is not documented in existing accounts of Fordism and the 2nd Food Regime. In each of the MSFP cases though, technical management was undertaken centrally, at head office, which is consistent with accounts of industrial organisation and regulation under Fordism (for example, see Bryson and Henry 2001). Thus, MSFPs have pursued different and individualistic approaches to company development between 1947 – the late 1970s, with two of the three MSFP cases pursuing approaches similar to those recorded in the literature (for example, see Hall and Sweeney 1986; Howe 1983; Welsh 1997).

Only three of the sampled SME food processors were active between 1947 and the late 1970s. **Company D**, **Company E** and **Company G** were the oldest and largest (in terms of number of employees) SME food processors in the sample. None of these had developed

their enterprise activity and / or market share through intensive merger and acquisition activity. Instead, they explained that they had developed their market share by opening their own retail outlets (**Company D** and **Company G**), expanding the size of their processing facilities and their end product range (all 3 SME food processors), and changing the type of end markets they served and how they served them (**Company E**). **Company E** was the only SME food processor interviewed that had been acquired by a larger food processing company, leading to a relocation and enlargement of their processing site and a widening of their end market. This example demonstrates how a primary processor, an upstream supplier to secondary food processors, has established the ability to control the activities of a secondary food processor and how that secondary food processor (in this case **Company E**) has retained its original trading name and location. In sum, those SME food processors that existed between 1947 and the late 1970s did not develop their enterprises in the same way that the literature suggests was a key feature of the MSR of the 2nd Food Regime, through intensive merger and acquisition activity (see Chapter 2).

Considering now the approach taken by farmers, in most cases, the interviewee was not farming between 1947 – the late 1970s, so they had no personal experience of how their farms were managed during that period. Farm existence and development prior to the 1980s was therefore not highly detailed in the empirical findings. Two farmers that helped manage the farm they were currently based on between the late 1940s and the late 1970s revealed, however, that the family had always managed the farm. They had not been bought by larger farms or estates, and had not been managed by non-farmers. In addition, these farmers had applied capital intensively in order to expand production and there was evidence that farms had produced the same commodity for a number of years. Thus, farmers extended their economies of scale and business opportunities by expanding production of a single type of commodity and this often meant expansion of the land area covered by the farm. These two case study farmers therefore appeared to have approached business development in the way that the literature suggests was the norm between 1947 and the late 1970s, during the 2nd Food Regime (for example, see Commins 1990; Ward 1993).

7.2.2 Company Establishment and Development: Late 1970s onwards

The literature reports that post-Fordism, capitalist production and supply relations are based upon flexible and closely knit networks of enterprises that seek to meet market and varied consumer demands in cost effective ways (see Bryson and Henry 2001; Fine 1995; Jones 1997; Holly 1996; Scott and Storper 1992). It has been reported that since the late 1970s, many capitalist enterprises have divested of their least profitable and non-core activities and focused development related investment activity on managing their core (most profitable) activities in a flexible way.

A 3rd Food Regime in the AFS of the developed world is said to have prevailed between the 1980s and the present day, during the same period of time as post-Fordism (see Atkins and Bowler 2001; Ilbery and Bowler 1998). Under the 3rd Food Regime, it is suggested that all participants in the AFS are concerned with having cost effective and profitable responses to highly differentiated and alternative consumer demands. Literature suggests that this has generally led food processors and farmers to neither pursue economies of scale, nor engage in State and retailer informed activities. In contrast with other industrial sectors, it has also been suggested that, under a 3rd Food Regime, it is no longer possible or viable for farmers to maintain and sustain their farm businesses by simply producing food (see Ahearn *et al.* 1985; Bateman and Ray 1994; Edmond and Crabtree 1994; Fuller 1990; Gasson 1984; and, Shucksmith and Winter 1990). Thus, farmers are reported to be diversifying their income earning activities and becoming involved in alternative end markets, for example the supply of non-food products to the general public.

Since the late 1970s the farmer and SME food processor case studies have adopted approaches to company development that are characterised in the literature as 3rd Food Regime typical. Once again though, each individual enterprise did not pursue the same approach as others in the sample and, when they acted in ways reported to be typical of the 3rd Food Regime, they did so for very individualistic reasons. In addition, the MSFPs' behaviour was not wholly reminiscent of that recorded in literature about the MSR of the 3rd Food Regime. Such considerations are not currently accommodated by existing literature.

To elaborate upon that, first of all, in terms of the MSFP case studies, **Company A** and **Company B** explained that since the 1990s they have sought to reduce the number of different markets they serve globally, and have divested of loss making enterprises. Such activity is similar to that characterised in accounts of the MSR of post-Fordism. As they have divested of their loss making enterprises, **Company A** and **Company B** have also retained centralised management and control over company development, as was the case during Fordism. In contrast, **Company C** explained that, in an attempt to insure themselves against the possibility that they could not meet their principal end customer's demands, they began to acquire a number of different smaller companies that complemented their existing product range and enabled them to enter new markets. Thus, they appear to be adopting the approach that **Company A** and **Company B** adopted prior to the 1980s, during Fordism, and the period of time that has been referred to as the 2nd Food Regime. That said however, after the fieldwork was completed, **Company C** was acquired by a larger, British food processor that is a key supplier to **Company C's** principal end customer.

Findings also revealed that only one of the MSFPs (**Company B**) was undertaking independent research into consumer demands and that each of the MSFPs' new product development activity was largely directly influenced by their end customers (the MGRs). These food processors do not therefore demonstrate a tendency towards more direct linkages between food processors and consumers, which the literature suggests is the case during 3rd Food Regime and post-Fordism. It appears that the MSFPs have pursued different and individualistic approaches to company development between the late 1970s - 2001, and their experiences do not always reflect accounts of how food processors have developed post-Fordism, during the period of time that has been referred to as the 3rd Food Regime.

In contrast, between the 1980s and the present day, the SME food processors revealed that the approaches that they had taken towards company development were similar to those reported in the literature as being characteristic of the MSR of 3rd Food Regime. For example, **Company G** had recently divested of a loss-making element of, and downsized, the company in order to concentrate processing activity at one site. **Company D** had also focused attention on developing their more profitable end markets. The motivation behind

this activity was that the companies' respective owners / managers personally felt it was the right thing to do. None of the SME food processors (except Company E whose ultimate end customers (major MGRs in the UK)) undertook consumer demand research though.

It thus appears that the SME food processors have pursued some 3rd Food Regime MSR like approaches to company development between the late 1970s – 2001. However, in-depth analysis of their motivations reveals that they are not operating with a sole focus on meeting consumer demand as much as meeting their own demands. The Food Regime literature suggests, however, that being consumer demand responsive is the key motivation for such activity (see Atkins and Bowler 2001; Ilbery and Bowler 1998). Existing literature does not consider that individual food processors may primarily seek to do what they want would prefer to do. Case study findings suggest that this is possible though. In sum, it appears that the SME food processors, like the MSFPs, have not established close, direct contact with consumers to inform their company development decision-making.

Findings from the farmer case studies complement, to an extent, accounts of how and why farm enterprises have developed as they have between the late 1970s - 2001. For example, in a number of cases, to maximise farm income, farmers had expanded the scale of production by renting or buying land. Another two farmers had diversified their business activities, into a 'mainstream' form of farm diversification (by creating a B+B close to the farmhouse) in response to demand for that. Each of these had done so to increase the farm business revenue. In both cases, the diversified elements of their enterprises relied heavily upon the availability of family labour to service and maintain them, revealing a high degree of family independence, in an attempt to reduce business overheads and make the business more cost effective. Diversification was however not a common business strategy for the majority of the case study farmers. Instead, the majority of farmers were simply operating with caution, achieving lower profit levels, while observing the market and waiting for an opportunity to increase their profits through their agro-food production and marketing activities. Under these circumstances, farmers continued to produce the same commodity that the farm had always produced, using all available labour (family and contracted labour) and equipment as cost effectively and efficiently as they possibly could, and marketing it through well established end market supply linkages.

In keeping with theories about farmer behaviour more recently, a small number of farmers explained that they actively sought out high and added value end markets for their produce in an attempt to maximise their business revenue. Findings revealed that farmers are reliant on, and actively seek, information about market demands from their end customers (food processors). Each of the farmers that were interviewed recognised the importance of supplying products that meet end market and consumer demands. Furthermore, a number of farmers expressed concerns about the changeable nature of consumer demand changes and explained that they ultimately produced what their end customers (food processors) would buy. Such findings contrast strongly with theories in the literature which suggest that farmers act in relative ignorance of what the market demands and do not seek to communicate with their end customers. The farmer case studies therefore appeared to demonstrate the use of the same approaches to business development that are described in the literature as defining farmer activity in the 3rd Food Regime.

7.2.3 Supply Linkage Organisation and Regulation

Not all interviewees had worked in the enterprise they represented between 1947 – 1980s. Data about the organisation and regulation of food processors' and farmers' supply linkages during the 2nd Food Regime was therefore not available from each case study. In view of that, only the prevailing organisational and regulatory characteristics of the case study food processors' and farmer' supply linkages were analysed. As described under research hypothesis 2 (two), this was done to identify to what extent, how and why they did or did not reflect characteristics recorded in accounts of the MSRs of post-Fordism and the 3rd Food Regime and this sub-section focuses solely on that

Literature suggests that supply linkages under post-Fordism are largely based around horizontally and vertically co-ordinated, but not integrated, closely-knit relationships between upstream suppliers to an industry or enterprise (for example see Bryson and Henry 2001; Holly 1996; Storper and Scott 1992). Direct merger with, and acquisition of, suppliers is not undertaken since the guiding principles for post-Fordist supply linkages are flexibility, cost-effectiveness, innovation and timely responsiveness to market and consumer demand. Many supply linkages are therefore subcontractual relationships involving independent enterprises that are able to meet particular market and consumer demands at a certain time. Literature also suggests that, under post –Fordism, it is common

for industry to organise and develop supply linkages within and across a region. This is reported to be the case for those regions that possess a distinct competitive advantage over other regions, in terms of the resources that they possess, or those that they are able to process or produce. Often, these regions are more geographically peripheral or remote from former industrial areas and not substantially involved in productive industrial relations under Fordism (see Cooke 1996; Holly 1996; MacLeod 2001a, 2001b; Piore and Sabel 1984; Storper and Scott 1992). Following the crisis of Fordism, industrial supply linkage organisation and regulation between suppliers and producers in one region is considered to be commercially advantageous (see Cook 1996; Storper and Scott 1992; and Storper 1997).

In addition to theories about the organisation and regulation of supply linkages generally, there are theoretical accounts of the approaches to and influences upon supply linkage organisation and regulation in the AFS since the 1980s. The literature characterises this period of time as the 3rd Food Regime (see Atkins and Bowler 2001) and suggests that its MSR is quite different to the MSR of the 2nd Food Regime. For example, in terms of the influences upon supply linkage organisation and regulation, it is suggested that consumers currently demand safe and healthy food, of a certain quality, variety, type, and at the right price (for example, see Atkins and Bowler 2001; Lahidji 1998; Ray 1994; Tansey 1994; Vidal 1999; and, Warde 1997). The same literature contrasts this with the MSR of the 2nd Food Regime, which was based upon the principles of mass consumption of standardised produce, processed and produced in large volumes, using standard processes and methods.

Under the MSR of the 3rd Food Regime, food processors and farmers are said to organise and regulate their supply linkages to be responsive to market and consumer demand. To facilitate this, they need to be closely involved in vertically organised (but not integrated), flexible and *ad hoc* supply linkages with multiple grocery retailers or involved in direct selling to the consumer (see Atkins and Bowler 2001; Policy Commission 2002). What is more, an increasingly neo-liberal approach to regulating supply linkages makes MGRs increasingly, yet informally, the principal regulators of the AFS, who ensure that consumer demand is met. In these circumstances, food safety appears to be a key principle upon which AFS supply linkage regulation is based. The State's direct role in regulating the AFS has shrunk substantially as a result, as MGRs have become more and more directly

involved in designing and implementing supply linkage regulation (see Flynn *et al.* 1994; Marsden and Wrigley 1996; Marsden *et al.* 1998, 2000). In addition to this, the literature also suggests that food processors and farmers are currently largely either involved in the development / production of new foods using biotechnology to increase economies of scale and supply mass markets, or the creation of innovative or speciality foods to meet niche market demands.

Findings from the MSFP case studies revealed little similarity between the way in which their ingredients supply linkages are organised and regulated and approaches that are considered to be typical under post-Fordism and in the 3rd Food Regime. The case study SME food processors demonstrated ways of organising and regulating their supply linkages that were broadly similar to theoretical accounts of approaches to supply linkage organisation and regulation under post-Fordist and during 3rd Food Regime. Findings also revealed that livestock farmers' approaches to supply linkage organisation and regulation were broadly similar to theories about supply linkage organisation and regulation under post-Fordism and the 3rd Food Regime. In contrast, the dairy farmers' case study findings revealed few similarities in this regard. In addition to this, the MSFPs and SME food processors demonstrated approaches to choosing suppliers that the literature suggests are typical of post-Fordism and the 3rd Food Regime. Farmers also appeared to be influenced by factors that are core concepts in post-Fordist and 3rd Food Regime approaches to supply linkage organisation and regulation. For example, most farmers stressed that it was of the utmost importance to them that their end customers respect them and are willing and able to communicate with them.

7.2.3.1 The Nature of Supply Linkages

To elaborate upon this, the research reported above in Chapter 4 revealed that each MSFP generally operated *ad hoc*, flexible procurement linkages with the majority of their ingredients' suppliers which were regulated by verbal communications with delivery drivers and the suppliers themselves. Formal, legally binding contracts were largely used for the procurement of bulk quantities of commodities such as sugar and fat / oils that the MSFPs used in large quantities. **Company A,** though, proved to be the exception in this regard since they operated legally binding, formal milk supply contracts with over 300 dairy farmers within a 50 mile radius of their plant in Dalston, North Cumbria. This

assured them of a safe and reliable supply of milk of a specific quality that would meet their own and their end customers' demands. The need for a specific quality of ingredients was also a factor that affected the regulation and organisation of **Company C's** red meat supply chain and their principal end customer was involved in checks of new and potential suppliers' premises before any supply linkages was organised. The post-Fordist and / or 3rd Food Regime literature does not consider there to be a need for formal supply contracts between food processors and their ingredients' suppliers. Nor does it see a need for intervention in the suppliers' activities by the food processor and / or their end customer, to ensure that a specific quality of product was available. Instead, this literature appears to be based on an assumption that any supply linkage, for any item, can be flexibly organised on an *ad hoc* basis. In addition, **Company A** was the only MSFP to use suppliers located in the same geographical region for commercial reasons and to ensure access to their primary, perishable, ingredient. This finding contrasts with one of the reported features of the MSR of post-Fordism: that regional supply linkages and networks are the most effective way to organise and regulate virtually all supply linkages to satisfy contemporary consumer demand for added value and speciality products.

In contrast with this, the case of **Company B** supports the theory that all contemporary supply linkages can be flexible and *ad hoc* if they can be effectively regulated through more informal means such as trust and reliability. These are key concepts in regional / local supply network theories. **Company B** conduct all of their ingredients' supply linkages on an informal basis, terminating them when suppliers are unable to meet their quality demands. They procure huge quantities of ingredients for processing into biscuits for a wide range of end customers (primarily the largest MGRs in the UK) who each have very particular demands about the type and quality of ingredients to be used. This means that **Company B** use and rely on flexible, *ad hoc* ingredients' supply linkages to provide them with very specific types of ingredient. They believe that this suits their suppliers, who meet their demands simply because they want to supply to **Company B**, which, at the time of the fieldwork, was the largest biscuit maker in the world. **Company C** also do not use any formal or legally binding supply contracts with their suppliers. They explained that they do this because their end customer does not provide them with a contract for the procurement of the goods they process, so they cannot guarantee log term demand for ingredients that they require at one point in time.

In addition to this, some of the SME food processors were engaged in supply linkages with one another; many used ingredients' suppliers located in the same geographical region as themselves; and, like the MSFPs, most had highly specific requirements in terms of the type and quality of ingredients they procured. In addition to this, the majority of the SME food processors used *ad hoc*, flexible and, where necessary, temporary supply linkages with ingredients' suppliers to ensure the procurement of appropriate ingredients as and when they needed them. This contrasted with the MSFPs, but corresponded with theories about supply linkage organisation and regulation under post-Fordism and during the 3rd Food Regime.

However, many of the SME food processors demonstrated a different source of influence upon the way in which they organised and regulated their ingredients supply linkages to that cited in the literature. Indeed, rather than stating that an understanding and knowledge of consumer demands was the key factor affecting such decisions, eight of the nine SME food processor respondents explained that they operate as they do as a result of personal preference. Such a finding contrasts starkly with accounts that suggest that during the 3rd Food Regime, all activity in the UK AFS is consumer demand oriented.

Finally, all of the livestock farmers sold their stock, as and when it was ready for sale, on an *ad hoc* basis, via livestock auction markets in Cumbria. At the auction mart, the livestock farmers sold most of their animals to **Company G**, who would only but FABBL (Farm Assured British Beef and Lamb) assured red meat, but also sold lower quality stock to abattoir procurement agents. The linkage with **Company G** was entirely informal, often based on long term relationships and farmers having sought out information about what type and quality of livestock that **Company G** required. Thus, the livestock farmers demonstrated a post-Fordist, or 3rd Food Regime MSR like, approach to supply linkage organisation and regulation. The livestock farmers stressed that livestock auction markets were both currently and historically the most transparent and fair, trustworthy and efficient way to sell livestock. They also said that livestock auction markets are the most important providers of an opportunity, and place, for farmers to network with one another, and with their end customers. It is the most appropriate supply chain tool for a number of farmers who do not see how it could be replaced by a more efficient or effective mechanism. Such

a finding is particularly intriguing in view of emerging pressures for the closure of the livestock auction marts post FMD 2001.

In contrast with the livestock farmers, the dairy farmers sold their milk to **Company A** via a formal, legally binding supply contract (for details of this see Chapter 6). They demonstrated a preference to sell their milk to a food processor (end customer) located within 50 miles of their farm. Such proximate trading relations are considered to be characteristic of post-Fordist and 3rd Food Regime approaches to supply linkage organisation and regulation. Their relationships are however formal and legally binding, so they are relatively inflexible for farmers involved in these linkages who are unable to sell their produce in an open market like the livestock farmers are. They explained however that the supply contract was a form of insurance and assurance for them in the short term. Thus, it was seen to provide benefits to both farmers and their end customers and not to limit farmers' behaviour and market potential.

7.2.3.2 Supply Contracts

Regarding the use of formal supply contracts in the UK AFS more generally, most of the farmer case studies stressed that supply contracts are not necessarily tools that enable their end customers to treat them unethically or abusively. Such findings contrast strongly with accounts in the literature that describe farmers' supply contracts as manipulative tools that are used unfairly against farmers (see Commins 1990).

Linked to this, farmers discussed the variety of different ways in which they can market their end produce, and there was some agreement that it was best for them to use a variety of different ways to market their produce. This observation revealed a sense that, try as they might, farmers cannot ensure that their future marketing opportunities will benefit themselves. Furthermore, there was strong opposition to collaborative selling and marketing boards in particular, with suggestion of them being outmoded and inefficient. Such findings contrast starkly with emerging UK agro-food policy that promotes co-operation and collaboration as a sustainable and profitable way forward for farmers in the UK. These findings therefore raise a hypothesis that farmers may support the new collaborative farming model that is being developed as a way to secure more support from Government, but without any real faith that it will help in the long term. This is an issue

clearly need of further in-depth research, particularly in terms of the sustainability of AFS development.

7.2.3.3 Influences upon Supply Linkages

In terms of influences upon supply organisation and regulation, all of the livestock and dairy farmers explained that they organise and regulate production to meet their end customers' (namely **Company G** and **Company A**) requirements. Farmers also expressed a willingness and preference for close contact with their end customers (local food processors and the livestock auction market) to gain information about what produce was required. They had no direct contact with consumers, nor did the sample seek such contact. The literature about the MSR of the 3rd Food Regime suggests however that seeking awareness of food consumer demand is currently the norm in the UK AFS (see Atkins and Bowler 2001).

Regarding the choice of supplier and customer, literature suggests that, under post-Fordism and the 3rd Food Regime, ingredients are chosen on the basis of their intrinsic qualities, as opposed to the cost of procuring them (see Fine 1995). The factors affecting the food processors' choice of supplier and the farmers' choice of end customer differed however.

Considering the food processor case studies in this regard, first of all, MSFP and SME food processors alike stressed the importance of ingredients' quality and type as the principal factors affecting their choice of suppliers. For example, **Company B** explained that the Food Safety Act 1990 had made them more conscious of the need for, and more demanding of, high quality ingredients than they were prior to 190 when they had been primarily concerned with the cost of their ingredients. SME food processors also stated that the cost of ingredients was of little importance in their choice of supplier. Instead, they explained that product quality and type, as well as the quantity available, were of utmost importance. Such findings demonstrate, once again, how differentiated the SME food processor case studies' supply linkages are.

Finally, in terms of supply linkage organisation and regulation, the research revealed the substantial importance of food safety management to the continued existence and functioning of the UK AFS. This is a concept that has received relatively little attention as

an influence upon the MSR of the contemporary UK AFS, during the period of time that has been referred to as the 3rd Food Regime.

For example, MSFPs explained how they have direct relationships with suppliers of primary and fresh ingredients, and are active in food safety management for these ingredients. Generally though, MSFPs told their suppliers what they expected from them, and took an indirect role in the day-to-day management of food safety in their suppliers' premises. Their approach was therefore rather autocratic. This suggests a much less than flexible approach to supply linkage regulation due to the need to assure the food consumer that food safety has been managed properly along the entire supply chain. Such concepts are not currently articulated in the literature on the subject of food safety management.

In contrast with the MSFPs, the SME food processors generally felt unable to influence food safety management by their suppliers. Where it was seen that they did influence their suppliers' food safety management activities, it was as a result of them changing their own in-house food safety system to one that requires ingredients to be provided by suppliers who also operate that system. This, HACCP, approach has been applied across the industry and appears to be the most standard back up system for SME food processors, over and above the FSA 1990, which was generally seen as a way to ensure that their suppliers do what is legally required. Indeed, the SME food processors demonstrated substantial trust and faith in their suppliers to adhere to the Act and act with 'due diligence'. Such an approach to food safety management implies a flexible approach to decision-making amongst SME food processors. This suggests that SME food processors are highly independent, but very flexible, actors in the UK AFS. Such concepts have not yet been considered in the literature.

The management of food safety in-house in the MSFPs' and SME food processors' premises also varied. For example, each MSFP operates a different food safety system to meet their end customers' or their own head office demands. MGRs' specification that their suppliers adhere to certain food safety management systems as a way to achieve competitive advantage in a manipulative way is a concept that has been addressed by the literature (for example, see Morris 2000). In contrast, a small number of SME food processors employed people specifically to oversee food safety management. In all cases

though, the ultimate responsibility for food safety management in SME food processor premises rests with the owner / manager. This is the norm for management of safety in SMEs (see Quayle 2002).

Farmers ultimately explained that they generally relied on their own knowledge and experience to do what was required of them in terms of food safety. A number of farmers also explained that they had adopted industry wide food safety assurance schemes to assure their end customers that they were acting appropriately in this respect. A number of farmers were concerned however that the variety of food safety procedures that they were expected to undertake to meet their end customers' and food consumer demand was now more than ever before. This incurred higher and different costs for farmers, which they did not see as necessary. For example, livestock farmers described the additional work that they must do post BSE to ensure that their livestock can be sold, and explained that they received no support to help them do this. Regardless of the form and nature of their end market supply linkage, farmers cannot simply do what they individually feel is appropriate in terms of food safety management. They must follow the directions of their customer. This demonstrates a distinct lack of flexibility in terms of supply linkage regulation and supports arguments that the management of food safety by farmers is an increasingly onerous task (for example, see Morris 2000).

This closes the discussion that synthesises the key case study findings in relation to the advanced capitalist regimes of accumulation and Food Regimes specifically. What these synthesised findings contribute to existing theory in this regard is detailed in Chapter 8. The next section of this chapter synthesises the key case study findings about regionalised development of the UK AFS.

7.3 The Region and Regional Supply Models

The second research objective was to investigate how a sample of food processors and farmers in North Cumbria currently relate to and use the region in which they are located as part of their business continuity and management. The third objective was to investigate a sample of North Cumbrian food processors' and farmers' personal perceptions of the potential viability of the regional supply network model in the UK AFS. The key findings that relate to these objectives are discussed below.

7.3.1 Relationships with their Region

Theory suggests that the region is currently being seen as the basis for most contemporary competitive, industrial supply linkages. It has also been suggested that, under post-Fordism, regions that were previously under-developed or peripheral to direct development opportunities under Fordism, have better opportunities to become more directly involved in industrial, advanced capitalist accumulation activities (see Cooke 1996; Holly 1996; MacLeod 2001a, 2001b; Murdoch et al. 2003; Piore and Sabel 1984; Saraceno 1994; Storper and Scott 1992). There is however currently no empirical evidence about to what extent the relationships between food processors, farmers and the resources available in the region affects their existence and supply linkage organisation and regulation. This section therefore explores the key relationships between the case study food processors and farmers in order to contribute evidence about how meaningful the region is to the existence of food processors and farmers in the UK AFS. Thus it seeks to extend the debate about the role of the region in economic development.

In sum, the case studies' use of resources from within, and relationship with, the region are focused on their procurement of, and ease of access to, resources which enable them to continue and manage production and marketing as efficiently and cost effectively as possible. These food processors' and farmers' case study findings suggest that the relationships between these food processors, farmers, and the region they are located in are not centred on the exchange of agro-food produce. Such a theory has not yet been developed in the literature as a means to deconstruct and understand the viability of the concept of developing regional agro-food systems and supply networks.

To elaborate upon this, first of all, the benefits and limitations associated with being situated in North Cumbria and the use of resources from within North Cumbria varied across the sample. For MSFPs, it appears that their location enables continuity of operations at a very fundamental level, and so they are relatively embedded in the region. Existing literature does not cover such issues though and tends to focus on the way in which MSFPs relate to their ingredients' suppliers. Case study findings however reveal that location is significant to MSFPs and that being located in the north west of England does not disadvantage them in terms of relative market share and profitability in the AFS.

With regard to the SME food processors, there is evidence to suggest that the majority would prefer to use local suppliers to ingredients, as and when they require them. This was due to personal preference, and it appears to be important for SMEs to create personal and direct relationships with their suppliers, to meet their specific and highly individual demands. Findings also suggest that some SME food processors were more embedded in their location than others, extending beyond their original processing sites to create larger processing sites and retail outlets. Such incidents appear to occur as a result of personal preference and decision-making as well as opportunism, and do not represent standard SME food processors behaviour. Regarding the use of development agencies and institutions that may support their supply linkages, findings revealed that the majority of the SME food processors are members of and use the official Regional Food Group (RFG). While this has not changed their end market, it has improved their awareness of end market opportunities. In contrast, a small number of more specialist and niche SME food processors preferred not to be associated with the RFG since they felt that the market opportunities it provided were limited and not specific enough for their produce. RFGs do not therefore seem to be necessary or essential to the success of SME food processors. Findings also demonstrate minimal reliance on other supporting agencies such as Environmental Health Officers (EHOs) to help with adherence to FSA 1990 requirements, Business Link for advice about business management, and local colleges for training.

The farmer case studies, on the other hand, were dependent on end customers located within Cumbria if not within Northern Cumbria. This was seen to be especially useful for livestock farmers who meet the cost of transporting their stock to the livestock auction market. For dairy farmers, having a local end market for their produce is useful for those in more remote areas in particular since some dairies are unwilling to collect milk from more remote farms. For dairy and livestock farmers alike, personal and direct contact with their suppliers was important and their current supply linkages afforded them this.

In sum, the case studies demonstrate a substantial degree of use of a variety of resources that were available within the region. Indeed, the food processors and farmers saw the region as a provider of resources such as water; labour; and, road networks for MSFPs to be able to maintain and develop their processing activities and finished produce marketing.

The remoteness and relative rurality of their location was not seen to hinder their development and continuity. On the other hand, the SME food processors' use of and relationships with the region were related to their preference for using local ingredients' suppliers if there were appropriate types and quality of ingredients available locally. Quite generally, SME food processors were very independent and sought support and resources from the most easily accessible and appropriate source. It was not essential for them to procure local resources. Farmers use local end markets since this provides them with easy access to essential information that helps them manage their production and processing more efficiently, in line with market demand. In addition, selling to local end customers helps reduce their business overheads.

7.3.2 Regional Branding

Secondly, in terms of regional branding as a means to establish a linkage between the AFS and its geographical location, findings from the MSFP case studies revealed that finished produce was marketed with little to no use or reference to their location in North Cumbria. Instead, each MSFP used their own, and end customer, brands since the former are proven to be the most successful way to market their products. This suggests that regional and local food branding initiatives, which are supported by current and emergent UK AFS policies, may not be appropriate for all types of business, and sectors, in the UK AFS. The findings also suggest that, if policies that promote local food are implemented across the UK, locally and regionally branded foods could begin to compete with MSFPs' and MGRs' branded products. Existing literature has not begun to consider this. In addition to this, the opportunity to market produce in global markets seems to have longer term benefits for food processors than the use of regional branding. These concerns are of interest in relation to the commercial advantage related to current 'green' calls for the reduction of food miles and the development of local food markets as opposed to globalised food marketing (see Hughes 2004).

SME food processors also do not tend to use the name of the place in which they are located in the marketing of their products. Like MSFPs, they tend to use their own name on any labels and packaging, thereby creating a direct and highly personal relationship between them, the food they produce and their customers. Such SME food processor case study findings support the previously mentioned suggestion that they seek to construct,

conduct and develop their businesses by meeting their own personal demands and acting in accordance with their personal beliefs and preferences, rather than in response to consumer and market demand changes. These considerations are not currently addressed in the literature.

Finally in this regard, farmers generally conveyed an understanding of how and why regional branding is used. Most farmer case studies were however concerned that regional branding is a divisive approach to market development. For example, if farmers primarily breed replacement livestock for finishing elsewhere, they are unlikely to directly benefit as much as the farmer that sells the finished stock. Also, there was a sense of different opportunities for farmers to use regional branding according to the type of produce they are involved with. For example, beef and lamb has been successfully marketed with regional brands to date, but milk products do not seem to have had the same potential historically. What is more, in relation to the dairy farmers specifically, there was general agreement that regional branding would not be required by **Company A** since they have well established, globally recognised, highly competitive brands. Thus, dairy and livestock farmers alike seem to have little faith in regional branding as a way to make sustainable improvements to their end market returns.

The case studies did not therefore support the use of regional branding of agro-food produce.

7.3.3 Perceptions of a Regional Agro-Food Supply Network Model

Economic geography literature has suggested that regionalised supply linkage models to stimulate competitive, contemporary supply linkages that facilitate the development of peripheral and under-developed regions (see for example, Bryson and Henry 2001; Holly 1996; Storper and Scott 1992). Such models currently exist in the AFS in some locations of the world (see Arfinni 1999; Brusco 1982; Fanfanni 1994). But, despite recent policy calls and support for local food supply chain development (see, for example, Policy Commission 2002), they have not yet been widely and successfully adopted / developed in the UK. Moreover, there is no empirical evidence to suggest that regional supply networks would be a viable way to organise and regulate supply linkage activity for food processors and farmers.

In order to provide crucial insights to the potential viability of this currently popular model to UK AFS policy, this section explores the case study food processors' and farmers' perceptions of the viability of a regional supply network model in North Cumbria. As such it extends debates about the concept specifically in relation to a case study area of the UK AFS.

In sum the case study food processors and farmers each possessed very different opinions about the potential viability of a regional AFS supply network. While they did not entirely rule out the model, the type and nature of activity in the local AFS, and the case studies' unwillingness to collaborate or share information about end market demands would be likely to restrict opportunities for a regional produce supply network to be created. In contrast, there was marginally more support for a regional AFS information supply network to be created to provide technical management information. In this regard, there was strong support for local government to promote it; suggestion that regional offices of bodies involved in rural development should help regulate it; and, calls for independent development agencies and the livestock auction marts to be involved. There was also some suggestion that smaller food processors' and farmers' involvement in such a network could be protected, with support being voiced for larger food processors to sponsor the network and an entirely independent steering group to regulate it.

7.3.3.1 Regional Agro-Food Product Supply Networks

To elaborate on the perceived viability of a regional agro-food produce supply network first of all, MSFPs and SME food processors explained that use of such a network would depend on their ability to construct and maintain direct relationships with suppliers. In sum, they said that they would prefer to retain direct relationships with their ingredients' suppliers rather than use a collective of suppliers in the same location as them. Both sets of food processors have very specific demands of their ingredients' suppliers and it seems that if they can have a direct input in the procurement process, they would look on such a model quite favourably. It is also more likely that these food processors would benefit more from the inclusion of primary processors in the network as suppliers, since only a small number of MSFPs and SME food processors used farmers as ingredients' suppliers.

Farmers were also largely unsupportive of a product exchange network with other farmers and food processors in North Cumbria since they prefer their current, direct linkages with farmers that they meet at auction or in the village, and with their end market customers. Farmers also suggested that such networks would be expensive to use (i.e. that they would not receive adequate returns from involvement since such a network may be rather uncompetitive). They were also concerned that, in such a network, payment might not be frequent or regular enough to sustain them and their way of working. The farmers suggested therefore that there is no need to change current arrangements, unless they would be assured of being able to get more, better returns on a regular basis. Dependence on regular cash inflows was thus highlighted as a factor affecting their choice of marketing channel, but that is not a key influence upon prevailing agro-food policies that advocate the development of regional agro-food supply networks and linkages. Literature about the current situation in UK farming does not explicitly address this concept as yet.

7.3.3.2 Regional Agro-Food Information Exchange Networks

Next, this section elaborates on the key findings about the case studies' perceptions of the viability of a regional agro-food information supply network. In sum, the case study food processors' and farmers' willingness to be information providers for farmers and food processors in a regional supply network between them in North Cumbria varied.

All food processors were generally unwilling to provide information to others in their sector in North Cumbria, and **Company C** was the only MSFP that was prepared to act as a mentor for other food processors in North Cumbria. Their long-term relationship with their location, coupled with the fact that **Company C** is a significant employer locally appears to make them more willing to want to help develop the North Cumbrian AFS. Such issues are raised as key characteristics of firms in the agro-food networks in the 3rd Italy (see Arfinni et al. 1994; Brusco 1982).

A small number of SME food processors did, however, express some willingness to be active in an information exchange network, in principle, subject to their anonymity being retained, and their involvement being solely in response to particular questions, as well as the activity not being too time consuming for them. SME food processors generally, however, expressed concern that such a network could lead to a loss of competitive

advantage. A culture of trepidation and adversarial competition appears to prevail amongst the case studies, and may help explain their very personal and protective relationship with their company, and the food they produce. SMEs also suggested that an Internet based network for information and product exchange would be the best way to carry this forward.

Finally, in contrast with most of the food processors, and literature about the relationships between farmers and their end customers, farmers were generally supportive of such a hypothetical information exchange network as a means to gain advice about production, to improve their income. In sum, they felt that it may be risky to be involved in such a network, and that it would be equally risky not to be involved in such a network if it did exist. Such reasoning was based on their opinion that farmers would gain competitive advantage through more in-depth knowledge of local end market demands that may be available through such a network. Dairy farmers were especially keen to get more and better advice about technical issues, demonstrating a keen interest in ensuring that their farms were as productive as possible. In addition, livestock farmers suggested that livestock auction marts would be the best venue and place for such an information network since they are independent, objective, competitive and open to all possible buyers and sellers as well as being staffed by knowledgeable people. In this respect particularly, it appears that a very traditional aspect of the AFS (the livestock auction market) has stood the test of time and could now be an effective contemporary marketing tool for farmers.

7.3.3.3 Regulating Regional Agro-Food Supply Networks

Next, the key findings about the regulation of a hypothetical regional agro-food supply network are synthesised. In sum, perceptions of the potential involvement of the public sector and independent organisations in a hypothetical regional AFS supply network varied across the sample of food processors and farmers.

For example, MSFPs suggested that local government should do more to promote the local AFS and opportunities for local AFS participants to work with one another. SME food processors also called for the involvement of local government in the development of such a network, suggesting that they should, or could, provide grants to encourage food processors to use more local farmers. Such findings suggest that the government needs to be more directly and actively involved in bringing about regionalised AFS development in

the UK. Post FMD 2001 however, the State is encouraging food and drink industry participants and commercial organisations and groups to be centrally involved in UK AFS restructuring activities. A prime example of this is the Food Chain Centre (see Food Chain Centre 2002).

SME food processors also called for increased local provision of independent business management advice and food safety training, suggesting that such a network could provide that. This finding accords with that noted above, which highlights that local agro-food systems rely on a variety of resources and support, over and above exchanges of agro-food products.

Farmers made further suggestions in this regard, and were generally reluctant to include such 'external' agents as the NFU and MAFF (renamed DEFRA in June 2001), because they perceive them to have a reputation of not delivering benefits or assistance to farmers. Farmers recognised however that these groups would be involved in such a network 'because they always have been'. In contrast with this, like the SME food processors, the farmers voiced support in principle for the involvement of more recently established institutions whose common objective is to bring about rural development. This included, for example, the RDC (whose services are now, at a delivery level, provided by the RDAs and the Countryside Agency's regional offices). This illustrates that farmers see that such institutions also serve farmers, and that farmers trust them to help deliver support that will bring about positive change for farmers. Regional governance of rural development therefore appears to be more acceptable to these farmers, over and above older farming institutions that operate primarily on a national level. What is more, the dairy farmers also suggested that development agencies such as Business Link would be effective and appropriate regulators of such a network. Such findings demonstrate a degree of farmer acceptance of new and alternative support and advice providers that has not been documented elsewhere in the literature surrounding the issue of farm business continuity and development.

Case study SME food processors and farmers also suggested a number of issues to be borne in mind to ensure effective and equitable management of such a hypothetical

regional AFS supply network for the benefit of smaller farmers and food processors[56]. First of all, SME food processors suggested it would be appropriate to:

- Set a participating enterprise turnover ceiling to prevent smaller SMEs (with a demonstrable need for support) being disempowered in such networks.
- Encourage larger food processors to sponsor the network. This demonstrates that SME food processors are willing to work effectively alongside, but not with, local MSFPs (and this is a key issue in the 3rd Italy agro-food network literature), and only if they benefit directly from it, and if the MSFPs meet the costs of the network. This concept was at the heart of the failed Carlisle Food Forum, therefore there is a need for investigation of the real feasibility of this, particularly in view of the MSFP sample's reticence to be involved in such a network in principle.

In addition to responses from SME food processors, farmers suggested that:

- It would be potentially appropriate to regulate use of such a network so that all of those that sign up to it actually do use it on a long-term basis rather than changing their markets when the price is higher elsewhere. This finding highlights the farmers' apparent need to guard against adversarial opportunism between farmers and a lack of trust between farmers.
- A development agency could co-ordinate such a network since they would focus strategically on the market as a whole and not just a number of producers, therefore the quality of the information would be better. There was also a feeling that this would enable smaller farmers and food producers to be involved as much as the larger ones if they wish to, since the co-ordinator would be entirely independent and would aim to develop the market as a whole. These opinions were expressed by dairy farmers in particular, and suggest that dairy farms would be more willing to be involved with such institutions.
- Farmers could manage a regional information network and be more involved in proactive approaches to marketing their produce.
- The livestock auction mart is the most effective way to ensure that all farmers, regardless of their size, could gain access to such a network. Livestock farmers expressed this opinion and could not generally envisage a more competitive and inclusive way of providing such a network without the involvement of the marts.

Largely however, SME food processors were happy to develop their businesses independently, without a recognisable support system or group being established, and suggested it would be more beneficial to establish a collaborative transportation network / system between SME food processors in North Cumbria to help them reduce their transaction costs and increase their wider market access. Such findings indicate that

[56] It should be noted however that the MSFPs did not make any key contributions to understanding this issue which suggests a lack of concern for the principle.

collaborative production and input supply product or information exchange networks are redundant concepts in terms of helping smaller food processors and farmers and that there is now a more urgent need to support their distribution of end products to the best and most appropriate end markets. These concepts have not yet been explored in the literature. Moreover, the farmers' responses suggest that farmers are very different and that their production activities and experiences are likely to affect their perception of appropriate support providers. For example, livestock farmers appeared to be more willing to consider the possible use of traditional support services and providers to support their supply linkages at the present time. In contrast, dairy farmers appear to be more willing to use and trust non-traditional, and highly commercial, sources of support for their supply linkages at the present time. Existing literature about farm business management does not generally acknowledge that different types of farmers may have different perceptions, preferences and opinions about support services as a result of the type of production they are involved in. This approach may however be useful to identify with necessary support systems for different farmers, according to their type of production.

7.4 Findings in Relation to Regulation Theory and Power Relations

The fourth and final research objective for this study was to compare theories about the sources and holders of power and influence in the UK AFS with empirical evidence from a sample of food processors and farmers in North Cumbria. In sum, it appears that:

- Consumer demand is less able to influence the behaviour of the case study food processors and farmers than is perceived and recorded in the literature.
- Government's role in these case studies' supply linkage organisation and regulation is reminiscent of literature based accounts of its general role in the UK AFS.
- MGR power and influence is a highly individualistic, and not a general phenomenon. MGRs do not generally affect farmers or food processors, but they are able to, if and when they are in a supply linkage with them.
- MSFPs are more directly affected by MGRs and their own demands than consumer demands.
- SME food processors have a very different approach to ingredients' procurement than MSFPs, and only directly impact those farmers and food processors that they procure ingredients from. They generally follow their own perceptions of the right, or preferred, thing to do, claiming to not generally be influenced by consumer demand changes. In the case of farmers, for convenience reasons, they generally use local farmers, and so they have a high degree of influence over local farmers.

- Farmers' ability to influence their own activities in these case studies is entirely reminiscent of existing literature based accounts of the same.

To elaborate on this, based on Chapters 2, 4, 5, and 6, the remainder of this section compares theoretical accounts of, and key case study findings about the holders and users of power and influence in the UK AFS. It also considers the nature or form of that power or influence, in terms of supply linkage organisation and regulation in the UK AFS.

According to Chapter 2, consumer demand is highly dynamic and directly affects Government AFS policy making; MGRs' procurement activities; food processors' supply linkage organisation and regulation and day-to-day processing activities; and, farmers' supply linkage organisation and regulation and day-to-day production activities. Key aspects of their influence / power in the AFS are: their willingness to pay for food; their preference for food of a certain quality and type; and, their demands for safe food. The case study findings support the theory that consumer demand is highly dynamic and directly affects Government AFS policy making and MGRs' procurement activities. Findings also suggest that consumer demand appears to only indirectly affect MSFPs' supply linkage organisation and regulation and day-to-day processing activities. It's impact on SME food processors' and farmers' supply linkage organisation and regulation and day-to-day respective processing and production activities is less direct and less substantial still. Finally in this regard, case study findings support the theory that consumers are able to influence the AFS as a result of their willingness to pay for food, their preference for food of a certain quality and type, and their demands for safe food.

Chapter 2 also describes how it has been suggested that the State influences the UK AFS. In sum, it has been suggested that (central and local) Government policy and legislation directly impacts MGRs' procurement activities; food processors' supply linkage organisation and regulation and day-to-day processing activities; and, farmers' supply linkage organisation and regulation and day-to-day production activities. Linked to this, the case study findings demonstrate that (central and local) Government policy and legislation directly impacts MGRs' procurement activities; MSFPs' and SME food processors' supply linkage organisation and regulation and day-to-day processing activities; and, farmers' supply linkage organisation and regulation and day-to-day

production activities. What is more, it was evident that a key aspect of the State's influence or power in the contemporary UK AFS is food safety regulation.

The conceptual framework in Chapter 2 also summarises how it has been theorised that MGRs' demands generally directly impact MSFPs' and farmers' supply linkage organisation and regulation, and day-to-day activities. Theory suggests that key aspects of MGRs ability to influence the UK AFS are their regulation of food safety, and demand for food of a certain type and quality at a certain price, and available at a certain time. Case study findings illustrate that MGRs directly impact MSFPs' and SME food processors' supply linkage organisation and regulation and day-to-day processing activities only when they procure products from them. In addition, case studies did not show that MGRs directly affect the case study farmers' supply linkage organisation and regulation and day-to-day production activities. Finally, in this regard, case study findings concur with theory about key aspects of MGRs' influence or power in the UK AFS.

Literature on the UK AFS also theorises how food processors influence the UK AFS. As detailed in Chapter 2, it has been suggested that food processors are able to directly impact farmers' supply linkage organisation and regulation and day-to-day production activities. In addition, it has been suggest that they are able to do this because of their demands for food of a certain type and quality at a certain price, and available at a certain time, to meet MGRs' demands.

Case study findings revealed that MSFPs and SME food processors have different abilities to influence behaviour in the UK AFS. For example, it was shown that MSFPs' procurement activities only directly impact the supply linkage organisation and regulation, and day-to-day production activities, of farmers they procure from. Most MSFPs use primary food processors as ingredients suppliers though, and therefore they directly impact their supply linkage organisation and regulation, and day-to-day processing activities of food processors that they procure ingredients from. Key aspects of MSFPs' influence or power in the UK AFS were seen to be their demands for safe food, of a certain type and quality at a certain price, and available at a certain time, to meet their own internal and MGRs' demands. In addition to this, the case studies show that SME food processors' procurement activities only directly impact the supply linkage organisation and regulation,

and day-to-day production activities, of the farmers and food processors they procure ingredients from. They also show that key aspects of their influence or power in the UK AFS are their demands for food of a certain type and quality at a certain price, in a certain quantity, and available at a certain time, to meet their own internal demands.

Finally, the literature has theorised the relatively non-influential position that farmers occupy in the UK AFS. Chapter 2 describes how it has been theorised that farmers' are only able to directly influence farm business planning and case study findings would concur with this.

To close this section, it is suggested that these findings highlight ways in which existing theory has not completely captured the nature and form of power relations in the UK AFS. They also appear to suggest a need for more in-depth questioning of general claims in the literature, using a RT approach. This issue is considered in detail in Chapter 8.

7.5 Summary

This chapter has clarified what the key empirical findings are, and has identified how and why they relate to existing accounts of the power relations within, and which affect or characterise, the organisation and regulation of supply linkages in the UK AFS. In sum, the key relationships between the empirical findings and the conceptual framework are as listed below in relation to the research objectives.

First of all, research objective 1 was: " *To explore the concepts of regimes of accumulation under advanced capitalism in the context of the UK AFS, with particular reference to the notion of Food Regimes and the 3rd Food Regime in terms of actual food processor and farmer experiences*". Case study findings demonstrate that:

- MSFPs' and SME food processors' approaches to business establishment and development between 1947 – the late 1970s are not typical of accounts of approaches under Fordism and the '2nd Food Regime.
- Where it was possible to analyse them, it appeared that farmers' approaches to business establishment and development between 1947 – the late 1970s are typical of accounts of approaches under Fordism and the '2nd Food Regime.
- MSFPs approaches to business development since the late 1970s are not typical of accounts of approaches under post-Fordism and the '3rd Food Regime.

- SME food processors' and farmers' approaches to business establishment and development since the late 1970s are typical of accounts of approaches under post-Fordism and the '3rd Food Regime.
- Since the late 1970s, the MSFPs, the SME food processors and the farmers have largely pursued flexible approaches to supply linkage management and key factors affecting the organisation and regulation of supply linkages between food processors and farmers are food quality, type and variety.
- Food safety is a key concern in terms of supply linkage organisation and regulation and MSFPs are able to dictate food safety regulation in their suppliers' premises, SME food processors feel unable to do so, and their end customers tell farmers how to manage food safety in house.

Secondly, research objective 2 was: "*To investigate how a sample of food processors and farmers currently relate to and use resources within the region in which they are located to assist with business continuity and management*". Case studies revealed that:

- The food processors and farmers relate to the region that they are located in through the use of tangible resources that support their production and marketing activities, but do not rely on agro-food product exchanges locally.

Next, research objective 3 was: "*To investigate a sample of food processors' and farmers' personal perceptions of the potential viability of a hypothetical regional supply network model in the UK AFS*". Case study findings show that:

- Food processors and farmers would be unwilling to use anything less than very direct linkages with their, respective, suppliers and end customers and so would not be willing to use or otherwise be involved in a regional agro-food produce supply network.
- Food processors and farmers would be unwilling to use anything less than very direct linkages with their respective, suppliers and end customers to exchange information about their supply linkages. Food processors would therefore be unwilling to provide information to other food processors and farmers that they are not formally related to via a regional agro-food information supply network. Farmers would, conversely, appreciate the opportunity to be involved in a regional agro-food information supply network to secure information about how to make their production and marketing more market responsive.

Finally, research objective 4 was: "*To compare theories about who or what has the ability to influence how supply linkages are organised and regulated in the UK AFS (who has power in the UK AFS) by comparing empirical evidence from a sample of food processors and farmers with existing theory*". Case study findings demonstrate that:

- The power relations and actors that are able to affect the organisation and regulation of these food processors' and farmers' supply linkages are very different between the cases. Generally though, farmers are influenced by their end customers and food processors are affected by their own decision-making, MGRs, and food consumers.

With reflection on the above, it can therefore be said that the case study findings do not support claims that there have been two distinctly different MSRs in the UK AFS between 1947 – 2001. The case study farmers and food processors do use resources that are available, and procured from, within North Cumbria. They also demonstrate however, that the geographical locations of the case study enterprises do not, in themselves, affect the continuity and existence of those enterprises in the UK AFS. Amongst the case study enterprises, there was mixed support for a hypothetical regional agro-food product or information supply network between farmers and food processors in North Cumbria. What is more the nature, variety and extent of types and sources of influence upon the case study farmers and food processors is not, in every case, as indicated in existing theoretical accounts of that. Chapter 8 theorises what these findings contribute to existing understandings of RT, Food Regimes and regional development in the context of supply linkages and power relations in the UK AFS.

Chapter 8
Conclusion

8.1 Introduction

This chapter provides an exposition of how the synthesised case study findings detailed in Chapter 7 contribute to the research objectives. To reiterate, the research objectives are:

1. To explore the concepts of regimes of accumulation under advanced capitalism in the context of the UK AFS, with particular reference to the notion of Food Regimes and the 3rd Food Regime in terms of actual food processor and farmer experiences.
2. To investigate how a sample of food processors and farmers currently relate to and use resources within the region in which they are located to assist with business continuity and management.
3. To investigate a sample of food processors' and farmers' personal perceptions of the potential viability of a hypothetical regional supply network model in the UK AFS.
4. To compare theories about who or what has the ability to influence how supply linkages are organised and regulated in the UK AFS (who has power in the UK AFS) by comparing empirical evidence from a sample of food processors and farmers with existing theory.

8.2 Regulation Theory and the Contemporary UK AFS

In accordance with research objective 1, this study used the RT approach to explore the concepts of regimes of accumulation under advanced capitalism in the context of the UK AFS. Regulation Theory (RT) was developed as a way to explain how crises occurred under capitalism, and how those crises provide for dynamic change and accumulation (see DiGiovanni 1996). The roots of RT are to be found in Marxist studies of labour processes and interpretations of the role of the State in managing labour-capital relations. RT suggests that capital accumulation occurs unevenly over time, in accordance with a prevailing MSR. As detailed in Chapter 2, section 2.2.1, a MSR is a collection of specific social relations that are dynamic and evolve as a result of social relations in a system. It is comprised of institutionalised social, economic and cultural compromises that operate at different spatial scales. It is promoted and challenged by different sets of social groupings that enable capital accumulation and determine the circumstances in which that occurs (see Drummond and Marsden 1995; Gibbs 1996; DiGiovanni 1996; Wilkinson 1997). Chapter

2 describes how, under advanced capitalism, it is considered that there have been two regimes of accumulation: Fordism and post-Fordism.

8.2.1Fordism

A number of writers (for example, see Bryson and Henry 2001; Cooke 1996; Holly 1996; and MacLeod 2001a, 2001b) have considered how, under Fordism, capitalist accumulation occurred through an MSR in which production activities and supply linkages were organised and regulated as follows:

- Industry was generally concentrated in oligopolistic, large manufacturing enterprises that were involved in highly integrated vertical supply linkages with upstream suppliers and intensive merger and acquisition activity was commonplace amongst larger MNCs.
- Those responsible for producing the finished product directly influenced / prescribed the type and nature of their upstream suppliers' activities.
- There was use of dedicated machinery and large inventories of stock by masses of labour in huge factories that produced large batches of standardised products for mass consumption.
- There was mass production of standardised products for mass markets complemented by hierarchical separation of scientific management from blue-collar workers.

In the late 1970s, Fordism suffered shocks from external events and entered crisis (see Bryson and Henry 2001; Holly 1996; Lipietz 1997), leading to changes in the way in which labour-capital-State relations were applied in, and to, industrial production and supply linkages. The crisis of Fordism has been viewed as a crossroads in the historical development of capitalism (Bryson and Henry 2001). Following the crisis, industry could no longer be organised and regulated as it had been under Fordism. In particular, the role of the State in organising and regulating labour-capital relations was much reduced. Regulation theorists have suggested that this means that supply linkages and production activities were subsequently organised in a 'post-Fordist' fashion (see Allinson 2004; Bryson and Henry 2001; Cooke 1996; Holly 1996; and MacLeod 2001a, 2001b).

8.2.2 Post-Fordism

The MSR of post-Fordism has been characterised thus:

- Industry is generally characterised by a large number of flexible and closely knit, horizontal and vertically co-ordinated enterprises involved in a variety of different, vertically disintegrated, production and supply relations / networks using subcontracted labour and resources where appropriate.

- Production and supply relations are generally decentralised and confined to individual regions.

- There is dependence on, and development of, two-way information exchanges throughout the entire production and supply system to ensure market responsiveness.

- The overall objective of supply and production relations is to respond to market demand in a cost effective manner. A popular way of achieving this is through the use of flexible and just-in-time practices to reduce inventory and maximise efficient production for the end market.

Some environmental and rural geographers have begun to explicitly consider whether the AFS has become post-Fordist (for example see Wilson 2001; Evans *et al.* 2002), but the literature is neither extensive, nor conclusive. This study therefore sought to contribute to this debate. To do that it hypothesised that if the farmer and food processor case studies organised and regulated their production and supply activities and linkages in a post-Fordist manner, they would demonstrate the following characteristics:

- Comprise closely-knit, horizontally and vertically co-ordinated relationships, with and between, upstream suppliers.

- Operate flexible, cost-effective, innovative and timely supply linkages to respond to market and consumer demand.

- Enter into subcontracted relationships with independent enterprises that are able to meet particular market and consumer demand/s at particular times.

- Operate regionally organised supply linkages, particularly in more remote regions.

- Be involved in either the production of innovative and / or speciality foods to meet niche market demands.

- MGRs would regulate their supply linkages.

- Supply linkages would be regulated, principally, to ensure food safety with the State playing a marginal, and MGRs a substantial, role in this regard. Specifically, MGRs would be directly involved in designing and implementing supply linkages to ensure food safety was preserved and maintained.

Considering the above, alongside the case study findings in Chapters 4 – 7, it is apparent that some, but not all, of those characteristics are present in the supply linkages of the farmer and food processor case studies. In sum, the study findings suggest that food processors and farmers can and do demonstrate a number of the supply linkage organisational and regulatory characteristics that RT suggests prevail at the present time. There is no evidence to suggest that each and every food processor and farmer possesses these characteristics however. Indeed, it seems that the organisation and regulation of supply linkages between food processors and farmers vary according to:

- the scale of the enterprise in terms of number of employees;
- the type of ownership and the owner's personal preferences;
- the type and form of the enterprise's activities and nature of supply linkage organisation and regulation; and,
- the type of ingredient involved.

These findings demonstrate that existing RT about the contemporary UK AFS fails to adequately take account of the difference between the AFS and other sectors of the economy. The use of an in-depth qualitative case study approach to investigate the way in which a sample of food processors and farmers organise and regulate their supply linkages made it possible to determine this and establish the foundations for future work of this type.

8.3 Regional Development in the Context of the UK AFS

With regard to research objectives 2 and 3, this section considers the concept of regional development in the context of the UK AFS. MacLeod (2001b) has suggested that recent formulations of RT that conceptualise sub-national (or, regional) regulation might offer a more accurate and deeper sense of the current recasting of social, economic and political forms, while simultaneously alerting us to their uneven economic geographies and sociologies. Taking this into account, this study undertook an RT approach to an in-depth, qualitative, case study based investigation of the potential for, and value of, using regional development in the UK AFS in relation to a specific sample of farmers and food processors in North Cumbria.

While it is not a novel approach, regional development is currently a popular approach in economic development policy and practice. It is a central concept in the literature about flexible production and supply relations under post-Fordism and is seen as arising from the globalisation of labour-capital relations and the hollowing out of the State's role in that respect (see Hudson 2003; Lipietz 1997). Furthermore, since the passing of the Regional Development Agencies Act in 1998, the clustering of economic development in the administrative regions of the UK has increased in popularity, and the regional organisation and regulation of economic development has been conceptualised as a break from the norm (Gough 2003). The concept of regional development in the context of the UK AFS in particular is very much a break from the norm in terms of advanced capitalist, industrialised, production and supply linkage organisation and regulation.

Since FMD 2001, the regional approach to AFS development has been supported by government as the way to achieve equitable development (for all), and farmers especially, in the contemporary UK AFS (see Policy Commission 2002). Elsewhere in the world, for example in the 3rd Italy, the regionalisation of AFS production relations and supply linkages is not unusual (see Arfinni 1999; Brusco 1992; Fanfanni 1994). In the UK, it is being adopted as a way to overcome virtually all of the problems associated with industrial agriculture. However, no critical inquiry about its real relative merits and disadvantages has yet been undertaken. This study therefore sought to understand the viability of such an approach to AFS production and supply linkage organisation and regulation. It began by asking how and why food processors and farmers currently use or relate to the region in which they are located, then, it asked how and whether the regional supply networks model might be transferable to the AFS of North Cumbria.

The study provided empirical evidence to suggest that the spatially defined geographical region and the name of the region are of some importance to the organisation and regulation of the supply linkages and production activities of the case study livestock and dairy farmers, the MSFPs and SME food processors. The study also determined the nature and type of the relationships between the case studies and their geographical location, illustrating that relationships between the sample and the region differed markedly between the MSFPs, the SME food processors and the farmers. Largely however, they were seen to relate to the use of physical, mental, labour, natural, and agro-food produce resources.

In contrast with these findings however, agro-food policy that seeks to stimulate regional AFS development across the UK strives to base such development primarily on intra-regional exchanges of agro-food produce, or the use of the region's name and identity as a brand or marketing tool linked to the tourist industry. One argument for this has been that this approach would help develop regional food identities and thus foster competition between regional foods, thereby stimulating potential market expansion and diversification, and increasing the number of marketing opportunities for those participating in the regional foods market. The case study findings suggest however that the agro-food resources of a region, and the region's image or name are not essential to the organisation and regulation of contemporary supply linkages in the UK AFS. Indeed, the case study findings suggest that the relationship between the case study enterprises and the region in which they are located is largely functional, related to the provision of essential resources (where they exist) for the development, reproduction and maintenance of their production and marketing activities. What is more, the use of regional branding as a means to enhance their market opportunities was seen by the sample as ineffective and unsustainable in the long term. Rather, they exhorted the need for continued regional availability of the resources they currently use as noted above.

The case study findings thus illustrate weaknesses and a lack of critical awareness within the prevailing and emergent agro-food policy in the UK AFS more positively. The study reveals that it is possible to create and maintain relationships between participants in the AFS, and providers of resources (particularly not food products) in the same location, to assist business continuity. In particular, with reference to the regional development debate, it appears that the type of services that underpin and support food processors and farmers are not dissimilar to those used by other sectors of the economy. Certainly, it is evident that the case studies were able to maintain their businesses and participate in the UK AFS without, being able, or needing, to procure agro-food ingredients from within North Cumbria.

These findings are particularly salient in terms of considering the potential viability and value of the regional supply model to the contemporary UK AFS. As detailed in Chapter 2, while regionalised AFS supply linkages are common in, for example, the 3rd Italy, they are

not particularly common in most of Western Europe. Since FMD 2001 in the UK though, regionalised development of the AFS is being seen as a way to re-empower farmers and specialist or niche food processors in rural locations in the UK. It is also being seen as a means to shorten the UK AFS, to make it easier to regulate, and to ensure food safety and quality (see Policy Commission 2002). Work addressing the concept of local and regional food has previously tended to focus on consumer demand for, and consumer attitudes towards, regionally branded foods and the marketing of such foods (see Weatherall *et al.* 2003). Unlike this study, it has not sought to understand or critically analyse the opportunities and constraints associated with establishing the supply relations and infrastructure that would underpin a regional or local AFS.

In brief, findings from this study suggest that a regional or local AFS supply linkage model would not be preferred over existing AFS supply linkages. MSFPs, SME food processors and dairy and livestock farmers each expressed a preference for the retention of existing supply linkages. None of the case studies were of the opinion that a hypothetical agro-food produce supply network between farmers and food processors in North Cumbria was necessary, or that it would work for them. Indeed, food processors and farmers, respectively, stated a preference for maintaining direct contact with their suppliers and end customers, to ensure that they understood their, respective, demands and abilities. The case studies also illustrate that, if it was seen to be a valuable alternative supply model for these farmers and food processors, a viable regional AFS supply model would contrast markedly with mainstream models of AFS supply linkage. For a detailed discussion of the mainstream, conventional UK AFS infrastructure see Bourlakis and Weightman (2004). Suffice to say however, it would require different types of support than those considered to be essential in existing AFS policy and development frameworks. For example, SME food processors expressed a preference for training in food safety and business administration to be provided, to underpin such a supply model. These are, however, not central to emerging and existing policy frameworks for UK AFS development.

In addition to the viability of a hypothetical, regionally organised and regulated agro-food produce supply network, the case study findings also provide evidence of whether a network would be valuable to food processors and farmers in this location. **Company C** and most of the SME food processors and farmers agreed that a regional information

exchange network might be useful for them. The food processors generally felt that such a network would help them convey messages about general best practice in supply linkage organisation and regulation on an anonymous basis and only in response to specific queries. However, if it was time consuming, they could risk losing competitive advantage or market share, or, it could deflect attention from their core business (and income earning) activities. Consequently, they would not be willing to be involved in it. From the farmers' perspective, such a network was seen to be potentially valuable if it improved their awareness of end market demands (livestock and dairy farmers) and (for dairy farmers alone), if it provided them with technical advice about managing production activities to meet end market demands.

Clearly, such findings cannot be used to generalise about all food processors and farmers of all sizes and types in all regions. They do reveal some intriguing insights into how each of these parties approach business development. MSFPs demonstrated a preference for a highly independent approach to business development, with little willingness to help other food processors and farmers develop. They therefore focus on activities that yield returns for themselves alone, as opposed to more altruistic aims of developing a competitive AFS more generally. SME food processors' responses also reflect such an approach. In itself, this is not surprising, but, as indicated above, farmers were generally very willing to seek out information that would help them meet market demands more effectively. Clearly this would benefit them as individuals since, if they produce to meet market demands, in theory they will maximise their revenue. In addition though, their willingness to link with their end customers in such a way enables the AFS to exist, and to continue to function. This is of substantial importance to the sustainable continuity and development of the UK AFS.

Finally in this respect, case study findings indicate how such a regional agro-food produce or information supply network between farmers and food processors could be managed. MSFPs did not generally respond to this question, perhaps because they had no preference for the model in principle[57], but SME food processors and farmers did. Responses generally focused on who would regulate and provide the physical base for such networks.

[57] Extended questioning around the subject was attempted in order to determine the reason for their unwillingness to respond to this question. But, no reasons were provided and discussion of the matter was distinctly brief.

For example, SME food processors suggested a preference for local authorities to be involved; dairy farmers expressed preference for development agencies to be involved; and, livestock farmers suggested that the livestock auction markets should be involved. These responses suggest a need for closer attention to supporting and growing established enterprises as opposed to attracting new enterprises.

In addition to this, dairy and livestock farmers alike suggested that the older farming institutions such as MAFF (renamed DEFRA in June 2001) and the NFU would 'have to be involved' in the organisation. They expressed little faith in them being able to provide any constructive assistance in this regard. Indeed, more faith was expressed in rural development support agencies and bodies.

In sum, this study has shown that, due to the variety of demands that food processors face, regionalised development of the UK AFS would not benefit the case studies if it was based solely around the supply / exchange of agro-food produce. Instead, from the case study findings, it appears that regional agro-food systems would be best achieved if they focused on the development of a business support infrastructure, and the provision of food safety, and other food industry related, training. This would certainly be attractive to SME food processors and farmers. In contrast, MSFPs appear to have little need for such a system since they have all of the resources they need to initiate, develop and maintain all of their business activities and supply linkages internally.

8.4 Food Regimes

Revisiting research objective 1 now, the study used the RT approach to explore the concept of Food Regimes. Food Regimes theory was adapted from RT by Harriet Friedman in the 1980s, to facilitate analysis of trends in North American, capitalist food production and consumption (Friedmann 1982; Friedmann and McMichael 1989; Whatmore 1994). The core tenet of Food Regime theory is that, as per the core concepts of RT, each Food Regime has a MSR which frames its existence and development. The study was concerned with the respective concepts of the 2nd and 3rd Food Regime, during the period of time spanned by the Fordist and post-Fordist regimes of advanced capitalist accumulation. These concepts were used as a framework for analysis of empirical data. Theoretical accounts of the respective MSRs of the 2nd and 3rd Food Regimes were summarised and

compared with empirical findings from the in-depth qualitative study of farmer and food processor enterprises in North Cumbria.

Subsections 8.4.1 and 8.4.2 discuss how the study findings relate to theoretical accounts of the MSRs of the 2nd and 3rd Food Regimes. Then, in relation to research objective 4, 8.4.3 discusses the related power relations in the UK AFS. 8.4.4 subsequently reflects on the usefulness of the food regimes approach to understanding supply linkages and power relations in the UK AFS.

8.4.1 Reflecting on the 2nd Food Regime

The 2nd Food Regime is said to have prevailed between 1947 - 1980s, during the same period of time as Fordism (see Ilbery and Bowler 1998). The study hypothesised that, if existing theory captured actual AFS participants' experiences during that period of time, the sample of farmers and food processors in North Cumbria would have possessed the following characteristics:

- taken the form of large scale, oligopolistic manufacturing enterprises;
- developed their businesses through intensive merger and acquisition activity;
- separated their technical management from factory / field level workers involved in the production of large batches of standardised products for mass consumption;
- applied capital in an intensive manner at farm level; and,
- acted largely in response to State and MGR directions / guidance.

Where data pertaining to this period of time was available, the study findings reveal some differences and similarities between theoretical accounts of the MSR of the 2nd Food Regime and case study findings. Data relating to this was minimal however, since not all of the interviewees had occupied managerial positions prior to the 1980s, and their recollection of business activities and supply linkage organisation and regulation was not perfect.

From the data made available it was determined that most of the MSFPs, except for **Company C**, and all of the farmers (livestock and diary alike) had intensively applied capital to their enterprises to support mass production of standardised products. In addition,

Company B and **Company A** had expanded their businesses through merger and acquisition activity and some farmers had also done this. In contrast, none of the SME food processors that existed prior to the 1980s had expanded their businesses by using this approach.

An area in which the limited data strongly resonated with existing theory about the 2nd Food Regime was identified however when farmers and MSFPs explained that they had undertaken production relations and supply linkages in order to supply large quantities of standardised products to their end customers. In particular, **Company B** explained that, prior to approximately 1990, economies of scale had prevailed as the key objective for their production activities and supply linkages. Since that time, they explained that food quality and safety had become a primary concern, over quantity and cost.

Case study findings that contrasted with theoretical accounts of the MSR of the 2nd Food Regime, or the MSR of farmers' and food processors' production activities and supply linkages between 1947 - 1980s, were identified. For example, SME food processors had located in North Cumbria to use their skills and exploit an easily accessible local market for their produce. Existing theory suggests however that MSFPs were 'all powerful' and that they eradicated opportunities for smaller food processors to maintain viable activities in the UK grocery market. In addition, **Company C** had remained in North Cumbria between 1947 - 1980s by developing their business to meet the demands of one principal end customer, but the literature reports how most food processors engaged in supply linkages with a variety of end customers, globally. Not all SME food processors were subsumed by larger MSFPs, and some were able to establish themselves as new, independent businesses pursuing a lifestyle based reason for starting up their businesses.

To summarise this sub-section, the, admittedly limited, findings from interviews with farmers and food processors in North Cumbria suggest that existing theories of the MSR of the 2nd Food Regime are generalisations, which shed light only on the activities of the larger and more capital rich food processors. The approach and methodology, as well as the sample, used by this study revealed that, in reality, each individual enterprise may operate in the same economic environment and end market but is likely to choose to start

up and develop their businesses (organise their labour-capital relations) according to their own (and, in the case of the MSFPs, their shareholders) objectives at the time.

8.4.2 Reflecting on the 3rd Food Regime

The literature suggests that the 3rd Food Regime has prevailed since the mid 1980s (see Atkins and Bowler 2001; Ilbery and Bowler 1998), since the crisis of Fordism, and during a period of time under advanced capitalism that is referred to as post-Fordism (see Ilbery and Bowler 1998). It was hypothesised that, if existing theory has captured real experiences during this period of time, the sample of food processors and farmers in North Cumbria would demonstrate the following characteristics:

- organise themselves in flexible and closely knit production and supply linkages between individual, independent enterprises;
- organise and regulate production activities and supply linkages to meet the highly differentiated and diverse set of market and consumer demands;
- use resources in a cost effective way;
- be selling off, or would have sold off, their least profitable and non-core enterprises and activities; and,
- farmers specifically would have diversified their income earning activities, becoming involved in alternative end markets, such as the supply of non-food products (e.g. holiday accommodation) to the general public.

For instance, the case study data supported existing theories about the major sources of influence upon food processor and farmer production activities and supply linkages. MGRs, food consumers, and food safety were key influences upon the (dairy and livestock) farmers, the MSFPs, and the SME food processors alike. The observed personality traits or decision making styles of the case study SME food processors also reflected existing theories in this regard. In addition to this, there were a number of areas in which the empirical data contrasted with theory about the MSR of the 3rd Food Regime. These included decision making and management style in MSFPs and in SME food processor enterprises. Indeed, findings suggest that individual enterprises retain their own way of satisfying themselves and meeting their own business objectives.

Findings from the farmer case studies also contrast with existing theories about farmer production and supply linkage activities and behaviour in terms of how and why farmers relate to their end customers. Literature on the subject (for example see Policy Commission 2002) has suggested that farmers are currently far removed from their end markets and end customers, and largely experience adversarial relations with them. This was not the case amongst the farmer case studies. The farmer case studies demonstrated that these farmers find contact with their end customers beneficial, and they did not agree that it was necessary for farmers to maintain close and direct contact with food consumers. The Policy Commission (2002) discusses this as a means to retain independence and power at farm level in the UK AFS. It is accepted here that this is the opinion of but a small number of farmers and that different farmers in other locations, involved in other types of end market supply linkage, may have a very different opinion indeed in this respect.

Another finding from the farmer case studies demonstrates that the majority of the sample of dairy and livestock farmers had not already diversified their income earning opportunities, and are not prepared to contemplate diversification of their enterprises and income earning opportunities. Such findings contrast strongly with literature and policy documentation that details the commonality, and popularity, of farm diversification. It suggests that some farmers have a continued focus on production and a desire to ensure that their output can be marketed at a good price. Existing literature on the subject has not considered such scenarios however.

8.4.3 Changing Power Relations in the UK AFS

The study's final research objective was concerned with the form that power takes in supply linkages in the UK AFS as well as how that power is exercised, by whom, and over whom. Existing literature in this regard suggests that the State and MGRs are able to influence the organisation and regulation of UK AFS supply linkages between farmers and food processors. In addition, since the late 1970s, responsiveness to consumer demand has been a key concern of competitive industry generally, including the AFS.

Little empirical work has however been carried out to test such theories and how and why some participants in the UK AFS are more able to influence supply linkage organisation

and regulation. Case study findings illustrate some similarities and some differences between theoretical and actual sources of power and influence in the UK AFS.

Through their purchasing patterns and lobbying activities, theory reports that consumers currently have the ability and seek to directly influence Government policy and legislation; MGRs' procurement strategies and approaches to supply linkage organisation and management; food processors' procurement strategies and activities; and, farmers' production activities and supply linkage organisation and regulation. Case study findings would support this theory. Case study findings would also support theories about the power that the Government has in the UK AFS. Indeed, case study data supported theories that, through the establishment of regulatory bodies and the creation of legislation and statutory procedures, (central) Government currently has the ability and seeks to directly influence consumer purchases; food safety regulation across, and throughout, the UK AFS; and, the content of agro-food policy. Case study evidence would support such theory.

There was however some differences between theoretical accounts of the power that the NFU has in the UK AFS. It has been suggested that the NFU is the most influential NGO in the UK AFS since it influences agro-food policy and farmers' production behaviour. Case study findings reveal however that, through lobbying activity, and involvement in agro-food and rural development work, NGO farming and rural development agencies and bodies, including the NFU, currently have the ability and seek to directly influence agro-food and rural development policies, including the regionalisation of agro-food and rural development.

Literature also suggests that, through their marketing strategies and approaches to supply linkage management and organisation, as well as the fact that they comprise the majority of the UK food retail market, MGRs currently have substantial influence in the UK AFS. Specifically, it has been suggested that they are able to directly influence consumers' food purchases; food processors' procurement strategies and activities; and, farmers' production activities and supply linkage organisation and regulation. Case study data would concur that MGRs can influence consumers' food choices and MSFPs' procurement strategies and activities. The data suggests however that they do not directly impact upon these case study farmers' activities and businesses.

It has also been suggested that, through their approaches to supply linkage management and organisation that meet their own and their end customers' (MGRs') requirements, food processors currently have the ability and seek to directly influence farmers' production activities and supply linkage organisation and regulation. Case study findings identify that these case study MSFPs and SME food processors impact upon the UK AFS in different ways. For example, with regard to the MSFP case studies, it was shown that the case study MSFPs' directly influence consumer food choices and their own production activities and supply linkage organisation and regulation. One of the MSFPs directly impacted upon one of the SME food processors' production activities, and supply linkage organisation and regulation, and another of the MSFPs' directly influenced dairy farmers' production activities and supply linkage organisation and regulation. In addition to this, SME food processor case studies demonstrated an ability to directly influence consumer food choices; their own procurement strategies and processing activities; and, when they procured ingredients from farmers, they directly influenced farmers' production activities, and supply linkage organisation and regulation

Finally, it is suggested in the literature that, to ensure that they meet their end customers' requirements and to sustain their businesses, farmers currently have the ability and seek to directly influence the farm family business plan. Case study evidence would support such theory.

The case study findings therefore highlight some differences between actual experiences and theoretical accounts of power relations in the UK AFS. The case studies also demonstrate that food safety regulation is a substantial influence upon AFS supply linkage organisation and regulation at the present time. Existing literature does not yet address this issue in much depth. In addition, the case studies showed how mass consumer markets provide a persistent need for mass, cost effective, production. Literature on the 3rd Food regime does not acknowledge this however. On reflection, the case study findings are by no means representative of the entire farming and food processor population in the UK AFS. Future research could usefully explore the existence of the power relations that are identified in these case studies in other sectors of the UK AFS in more depth.

8.4.4 Reflecting on the Usefulness of the Concept of Food Regimes

Case study findings would suggest that the concept of food regimes helps frame analysis of supply linkages and power relations in the UK AFS at a macro level. Findings reveal however that a single Food Regime and MSR cannot truly capture the true degree, and variety of, difference in UK AFS supply linkage organisation and regulation at any one point in time. Case study research revealed the differences that co-exist within the AFS of North Cumbria. For example, those case studies in existence between 1945 – late 1970s were established and operated and organised their supply linkages as a result of different actions, influences, and demands to those considered to characterise the MSR of the 2nd Food Regime. Similarly, case studies also reveal that those farmers and food processors in the sample that have been established since the late 1970s do not operate solely in accordance with the documented characteristics of the MSR of the 3rd Food Regime. Indeed, case studies suggest that different MSRs arise as a result of differences in types and scale of production, end customers' demands, legislature and regulations, and personal ideas.

Such findings suggest that to conceptualise supply linkages and power relations in the AFS in terms of Food Regimes, as other sectors of the economy have been, may not capture the range and variety of what really happens in the UK AFS. This is unhelpful for the creation and availability of meaningful intelligence about, and policies for, the sustainable development of the UK AFS. This is a crucial point to bear mind in terms of work towards a refinement of the concept of Food Regimes and when developing and conducting future analyses of supply linkages and power relations in the UK AFS. These two scenarios are discussed in section 8.5 with reference to how the case studies may inform future work in these areas.

8.5 Reflecting on the Value of Case Studies to understand Long Term Structural Change in the UK AFS

First of all, the case studies reveal that the existing concept of a Food Regime does not capture the differences that exist between, and within, the MSRs of all farming and food processor enterprises in the UK. Indeed, case study findings suggest that different MSRs arise as a result of *inter alia* differences in types and scale of production, end customers' demands, legislature

and regulations, and personal ideas. It is therefore suggested here that the concept of Food Regimes may be useful as a stylised model that enables analysis of the situation and change in specific locations and regions. However, to facilitate more accurate analysis of how supply linkages are organised, conducted and regulated, the theory could be enhanced to permit analysis of how supply linkages and power relations in the UK AFS change:

- within, and across, individual and different sectors and stages of the UK AFS;
- within, and across, different scales of enterprise within, and across, the UK AFS;
- as a result of different types of customer (e.g. MGR, food processors, and independent small grocery stores) demand;
- as a result of legislation and regulation which affects particular sectors of the AFS, e.g. those which establish EU abattoir hygiene standards; and,
- as a result of individual farmer and food processors' personal agendas.

Such an approach would develop a deeper understanding of the MSRs that comprise and impact different sectors of the UK AFS, and also be of substantial use in policy making for individual sectors of the UK AFS. Given that this work was conducted in only one small geographical area of the country, it may also be fruitful to compare whether and how the MSRs of AFS enterprises differ across, and between, the regions of the UK. Unfortunately this study could not afford an opportunity for such analysis. Clearly though, partly as a result of the industrialisation of the UK AFS, different regions have different concentrations of types of AFS enterprises, with different characteristics, and different types of supply linkage which affect a region's potential AFS development. it is suggested here that the existence, or otherwise, and characteristics of, regionalised Food Regimes in the UK is worthy of exploration, particularly in view of the existence of regional delivery plans for DEFRA's Strategy for Sustainable Food and Farming; the RDAs' AFS development remit; and, the work of the (national) Food Chain Centre which was created in response to the Policy Commission (2002). The possible eventual creation of regional assemblies throughout the UK would suggest need for a deeper understanding of regional differences within the UK AFS.

Such an approach to framing the development of an understanding about, and analysis of, supply linkages and power relations in the UK AFS would build a macro level understanding of the following and how they relate to the organisation, undertaking and regulation of supply linkages in the UK AFS in terms of:

- different sectors;
- different stages of activity;
- legislation and modes of regulation;
- enterprise scales; and,
- the region.

To relate this work to more micro work, researchers would usefully then construct methodologies that would help develop understandings of the meso level influences upon UK AFS supply linkage organisation and regulation. In view of the increasing regionalisation and modernisation of British Government, work at this level of analysis would focus on the nature and scope of the roles of intermediary actors and agency in the organisation and regulation of supply linkages in the UK AFS. The nature, type and scope of influence that England's Government Offices and RDAs, and large corporate actors such as the MGRs have in this regard would be a primary focus for such work.

This type of meso level analysis would, *inter alia*, shed a more precise light on where power is concentrated in the UK AFS, who uses it, why and how, as well as the variety of ways in which it impacts the UK AFS. Work of this nature would, it is suggested, benefit from both a national and regional (spatial) scale of investigation that would provide a significant depth of understanding and intelligence about the organisation and regulation of supply linkages in the UK AFS from academic, industry and policy perspectives. In turn, additional future work could develop a global (spatial) scale of analysis in a similar fashion, to develop deeper understandings of the AFS globally to assist more sustainable and realistic development of the AFS globally.

Secondly, this section considers the contribution that the case studies make to understanding how the UK AFS is regulated. If it is not valid to consider that the UK AFS is organised and regulated according to the established definition of a Food Regime, it is appropriate to consider how analysis of the case studies suggest that it is.

As detailed above, some of the food processor enterprises currently demonstrate some of the characteristics of the MSR of the 3rd Food Regime, for example the production of a varied range of niche / specialist and organic processed food products. In addition though, the same food processors and other food processors and farmers demonstrated more 2nd Food Regime MSR like characteristics, for example the mass production of standard commodities and processed foods. Such findings suggest that it would be inappropriate to conclude that the AFS of North Cumbria is currently organised solely in accordance with accounts of the MSR of the 3rd Food Regime. The literature would, however, suggest that it was. In addition, some of the case studies operate outside of North Cumbria (and some are part of a global company). Thus, it may be appropriate to suggest that the AFS in other locations in the UK and the world is also not organised solely in accordance with accounts of the MSR of the 3rd Food Regime.

This study cannot explore that hypothesis however, but, using the research model described above, it is suggested here that future research could. What this study can do in support of such future work, is shed light on the types of AFS participant, and core principles that appear to directly influence the organisation and regulation of supply linkages between farmers, food processors, retailers and MGRs, and consumers. In sum, in view of the case study findings, it appears that the following participants and principles directly impact UK AFS supply linkage organisation and regulation:

Core principles:
- Food safety
- Food quality
- Cost of production (for farmers and food processors)
- Price of food (to consumers)
- Secure availability of food

Core participants: Consumer demand
MGRs
Government

Chapters 4 – 7 illustrate how this conclusion has been reached; such detail will not therefore be repeated here. Instead it is sufficient and appropriate to briefly explain that consumers demand food that is safe, of an appropriate quality food, readily available and affordable to them as a grouping of numerous individuals with different tastes and different levels of disposable income.

In addition to this, MGRs assert that they act in response to, and in advance of knowing about, consumer demands. This often means making rather specific demands about the type, size and quality of food supplied to them by food processors and farmers to ensure continued availability of foods for their customers. In addition, since FMD 2001, MGRs have also become central to AFS policy making (see Lowe et al. 2003). MGRs have also been central to the system and institutional changes that have reformed the way in which the UK AFS is structured and supply linkages organised, conducted and regulated post FMD 2001. Such a move is noticeable in terms of the role that MGRs played in the Policy Commission report on the future of farming and the food industry in the UK (Policy Commission 2002) and the role they play in the Food Chain Centre.

Finally, nationally, Government has played an active part in the creation and passing of appropriate legislation to regulate food safety and oversee that competition in the UK AFS is fair and appropriate. Also, since FMD 2001, Government has made substantial moves to facilitate reform of the way in which the red meat sector of the UK AFS is organised and regulated on a national scale. The creation of DEFRA in place of MAFF symbolises Government's remit for environment, food and rural affairs (see Lowe et al. 2003). What is more, at a regional level, the RDAs are responsible for developing each of the region's food and drink sectors. Finally, District and County Council planning, policy, environmental health and economic development activity is been undertaken with a view to supporting the positive

and appropriate development of the local food and drink sector and industry, and protection of consumer rights.

Finally, RT focuses on the social relations that underpin a system, suggesting that, over time, capitalist accumulation is uneven as a result of the way in which labour-capital-State relations are played out in a system, and as a result of external shocks to the system. Case studies and the above explanation suggest that consumer demand is able to affect how UK AFS supply linkages are organised and regulated at the present time. Furthermore, it appears to both directly and indirectly influence the way in which labour-capital and State relations are played out in this sample of farmer and food processor enterprises in North Cumbria. This is not entirely surprising and is in line with theories about the core elements of the MSR of the UK AFS. The case studies however illustrate, in a seminal fashion, how it affects farmers and food processors in detail. Future work could explore whether consumer demand is as influential at other stages of the AFS elsewhere in the UK and further afield.

8.6 Reflections on the Study's Theoretical Framework

As described above, the study used a theoretical approach that combined RT and the concept of Food Regimes to enable critical in-depth analysis of empirical case study data about farmer and food processor enterprises in North Cumbria. Further to discussion about the study's research objectives and findings, it is possible and appropriate to consider what the study's use of that theoretical approach has demonstrated. This section therefore considers the value of using RT and Food Regime theory to understand the organisation and regulation of supply linkages and power relations in the UK agro-food system, specifically in terms of the study's research hypotheses.

8.6.1 The Relationship between Abstract Theory and Empiricism

The research findings demonstrate that from a RT perspective, at a macro level and very generally, some aspects of the Fordist and post-Fordist regimes of capital accumulation have been, and remain present, in the UK AFS between 1947 – 2001. First of all, in relation to Fordism, the literature review demonstrates a consensus that between 1947 and the 1980s,

enterprises in the UK AFS operated in ways that are considered characteristic of Fordist approaches to capital accumulation. It appears that food companies were generally concentrated in oligopolistic, large manufacturing concerns in vertically integrated supply linkages with upstream suppliers and in the 1980s particularly food processors engaged in intensive merger and acquisition activity. In addition, prior to the 1960s, food processors, who were responsible for producing the finished product, directly influenced / prescribed the type and nature of their upstream suppliers' activities. After the 1960s however, MGRs began to gain overriding influence in this regard. In addition, food processors used dedicated machinery and large inventories of stock in factories, often located throughout the globe and controlled from a central headquarters, which produced large batches of standardised products for mass consumption. Empirical case study data (albeit limited) shows that examples of this approach to production and markets can persist over time and co-exist with other models that reveal characteristics of post-Fordism at the present time. **Company A** and **Company B** certainly followed this type of approach to capitalist accumulation. In contrast though, the data also demonstrates that **Company C** followed a very different approach.

Secondly, in relation to post-Fordism, Chapter 2 demonstrates that across the globe there are some examples of post-Fordist types of AFS supply linkage organisation and regulation. For example, particularly in Italy and the Netherlands, there are flexible and closely knit, regional and decentralised, vertically disintegrated, supply relations or networks that are dependent on the use and development of strong collaboration within the supply chain. In the UK AFS, there is also evidence that supply linkages are flexibly organised and regulated so as to allow MGRs to respond to market demand promptly and in a cost effective manner. However, these have not all evolved or been developed since the 1980s, following the crisis of Fordism. Indeed, in Italy for example, regional AFS supply networks and linkages are the traditional, and culturally embedded, approach to organising and regulating supply linkages for food products such as Parmesan cheese and Parma Ham. In the Netherlands, such supply models are a more recent phenomenon though, with literature suggesting that this approach has been developed to make the domestic AFS more cost effective and responsive to market demand.

Case study data also demonstrates that being able to respond to end market and consumer demand is a way to ensure that supply linkages are cost effective, and that use of upstream suppliers by food processors can be flexible and *ad hoc*. In contrast with RT accounts of contemporary industrial organisation and regulation, the research findings demonstrates that, to be viable, supply linkages between food processors and farmers need neither to be organised on an *ad hoc* or regional basis, nor regulated in a flexible and decentralised fashion. Case study findings also show that AFS supply linkages are not always developed in response to consumer demand or predicated upon two-way information exchanges. Furthermore, RT does not take account of the potential impact of food safety upon the way in which AFS supply linkages are organised and regulated.

This study has also shown that existing literature which attempts to conceptualise supply linkage organisation and regulation generally accepts the concepts of the 2nd and 3rd Food Regimes. It is generally claimed that during the 2nd Food Regime, supply linkages in the UK AFS were organised between large scale, oligopolistic manufacturing enterprises that were developed through intensive merger and acquisition activity. Production activities were undertaken by workers involved in the production of large batches of standardised products for mass consumption. In addition, regarding farms specifically, it is generally accepted that capital was applied in an intensive manner at farm level and that farm production was informed and led by State, food processor, and MGR demands and directions. The discussion in 8.4.1 above demonstrates that such characteristics were observed in some case studies, but not all.

It has also been accepted in the literature, and recent and emerging policy rhetoric, that since the 1980s, during the 3rd Food Regime, food enterprises organise themselves in flexible and closely-knit production and supply linkages. Production activities and supply linkages are organised and regulated to meet the highly differentiated and diverse set of market and consumer demands. Food enterprises act in cost effective ways, meaning, for example, that the least profitable enterprises and activities are being sold off. In addition, and specifically in relation to farmers, this means diversification of their income earning activities and involvement in alternative end markets, such as the supply of non-food products (e.g. holiday

accommodation) to the general public. The discussion in 8.4.2 above demonstrates that such characteristics were observed in some case studies, but not all of them.

Case study findings therefore suggest that conceptualisation of the organisation and regulation of supply linkages in the UK AFS in terms of existing accounts of RT and Food Regime theory is useful at an abstract level. RT provides a means of establishing a broad and general understanding of activity across the UK AFS. It is, however, too generic and abstract a theory to provide an accurate description, or understanding, of supply linkages and power relations in the UK AFS at a regional scale or on an individual case basis. It seems most appropriate therefore to use this theoretical framework as a means to define activity and relationships in the UK AFS at a very macro level, as a baseline to be explored and investigated more closely using in-depth, possibly case study, methods. Food Regime theory provides more specific information and insights about the AFS, at a meso level. But, findings demonstrate that this theory cannot account for, and explain, all supply linkages and power relations in the UK AFS. Thus, it seems most appropriate to use this theoretical framework as a means to define activity and relationships in the UK AFS at a meso level, in addition to, and alongside, an RT approach, to provide additional insights into capital accumulation in the AFS. As with RT, it appears that this approach would provide a baseline, and generic, understanding of supply linkages and power relations in the UK AFS that would be most effectively explored and investigated more closely using in-depth, possibly case study, methods.

To close this section, very briefly, it is therefore recommended that future research could use a combination of RT and Food Regime theory to achieve a purely abstract level of understanding of the nature of supply linkage organisation and regulation in the UK AFS. However, to achieve an in-depth and more comprehensive understanding of how and why AFS supply linkages are organised and regulated as they are, by whom and where, micro scale investigation of empirical activity is essential.

8.6.2 Combining Abstract Theory and In-Depth Case Study Empiricism

This sub-section considers the above call for in-depth exploration of AFS supply linkages through the use of abstract theory and in-depth empirical investigation. In the above discussion it is clear that the in-depth, spatially concentrated, qualitative case study approach that was adopted by this study relied on existing accounts of RT and Food Regime theory. Attention to the study's findings demonstrates that these theoretical characteristics of AFS supply linkage organisation and regulation are, in reality, not reflected in all cases. Rather, 2nd Food Regime, or Fordist, and 3rd Food Regime, or post-Fordist, characteristics exist in some cases, in the same time and location, and some individual cases demonstrate a combination of both sets of characteristics.

The micro scale investigation undertaken by this study has, inevitably, revealed a highly detailed and specific set of understandings about supply linkages and power relations amongst these enterprises in the UK AFS. Such findings contribute to, and enhance, existing understandings of the UK AFS. They remain sector and case specific though, and are not directly transferable to, across, or throughout the entire UK AFS. It is therefore possible to say only that this sample of case study food processors and farmers did not want to be part of a hypothetical regionalised supply network between farmers and food processors in North Cumbria. Findings reveal detailed understandings of how and why this is the case, and these may be used to extend understanding through work using other case studies, in different locations in the UK AFS, using the understandings developed here as research questions and / or hypotheses.

8.7 Future Research

To conclude the chapter and the study, the following issues are outlined as areas for future research into supply linkages and power relations in the contemporary UK AFS.

- The relationship between the changing types of influence upon supply linkage organisation and regulation for different types of food processors and farmers.
- How different types of food processors and farmers use, and relate to, and are impacted by, food safety management legislation, regulations, and guidelines.

- The relationships between farm family dynamics and the location of the farm, particularly in upland areas that are dependent on livestock production and which have limited opportunities for alternative income earning activities.

- The extent to which, and how, a standard food safety management system such as HACCP could be implemented in, and across, all sectors and food types in the entire UK AFS, as a means to reduce adversarial relationships between MGRs, food processors and farmers specifically.

- The communication media used by actors in the UK AFS to ensure continuity of communications within the AFS. Case study findings showed that the telephone conversations and face to face meetings occurred frequently and willingly, but existing literature and policy rhetoric suggests that participants in the UK AFS do not communicate with one another. An easily accessible and manageable way of communicating with each other may benefit AFS continuity, and prevent future structural crises.

- Identification with the resources that are, or can be made, available within the region and which underpin actual farmers' and food processors' business activities and supply linkages. This may include, for example, food safety and business management training provision and a more substantial marketing support role for livestock auction markets. If fed into policy making, the results from such research would contribute more constructive insights into the viability and potential of developing regional agro-food systems in the UK.

- Consideration of the information needs of other farmers, of different types and size, in different regions. Findings from such research would contribute empirical understandings of how to create a more deeply integrated AFS in the UK, which is a core theme of current UK food and farming policy.

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Appendix 1: Research Objectives

1. To explore the concepts of regimes of accumulation under advanced capitalism in the context of the UK AFS, with particular reference to the notion of Food Regimes and the 3rd Food Regime in terms of actual food processor and farmer experiences.
2. To investigate how a sample of food processors and farmers currently relate to and use resources within the region in which they are located to assist with business continuity and management.
3. To investigate a sample of food processors' and farmers' personal perceptions of the potential viability of a hypothetical regional supply network model in the UK AFS.
4. To compare theories about who or what has the ability to influence how supply linkages are organised and regulated in the UK AFS (who has power in the UK AFS) by comparing empirical evidence from a sample of food processors and farmers with existing theory.

Appendix 2: MSFP Sample Details

Company Name	Location	Processing Activities	Number of Employees
Company A	Carlisle	• skimmed milk powder and associated products; • evaporated milk production.	288
Company B	Carlisle	• biscuit making.	1400+
Company C	Carlisle	• ready meals production; • confectionery production.	1500

Appendix 3: SME Food Processor Details

SME Name	Activity	No. of employees	Location
Company D	Bakery (bread, morning and other baked goods)	231	Lazonby, nr. Penrith
Company E		140	Carlisle
Company F		70	Melmerby, nr Penrith
Company G	Meat processor	100	Penrith
Company H	Game and poultry meat processor	8	Penrith
Company I	Trout processor and trout farm	4	Tirril, nr. Penrith
Company J	Mustard production	2	Alston, nr. Penrith
Company K	Dairy processor and small dairy herd	6	Nr. Carlisle
Company L	Fine chocolate production	4	Orton, nr. Penrith

Appendix 4: Farmer Sample Details

Farmer	Relative scale and farm type	Size of farm	Length of time in farming	Level of education	Age and sex of farmer
Farmer A	Large lowland dairy	2 farms: 370 acres in total	7 years; previously employed as pharmacist	University: studied *Pharmacology*	35-45, female
Farmer B	Large lowland dairy	250 acres	9 years	University: studied *Agriculture* at Newcastle University	45, male
Farmer C	Large lowland dairy	340 acres	Since leaving school at 16	Agricultural college	35-45, male
Farmer D	Large lowland dairy	345 acres	Since leaving school at 16	Agricultural college	45-55, male
Farmer E	Medium lowland cattle and sheep	417 acres	Since leaving university, over 20 years ago	University: studied *Agriculture* at Newcastle University	40-45, male
Farmer F	Large lowland dairy	365 acres	Since leaving school at 16	Agricultural college	35-45, male
Farmer G	Small beef	512 acres	Since leaving school at 16	Secondary school	48 , male
Farmer H	Large lowland dairy	365 acres	16 years	Agricultural college	35-45, male
Farmer I	Large lowland dairy	410 acres	Since leaving school at 16	Agricultural college	45-55, male
Farmer J	Large lowland cattle and sheep	740 acres	Since leaving school at 16	Secondary school	45-55, male
Farmer K	Medium / large lowland cattle and sheep	220 acres	Since leaving school at 16	Secondary school	25-35, female
Farmer L	Medium / large lowland dairy	270 acres	Since leaving school at 16	Secondary school	50, male
Farmer M	Large lowland cattle and sheep	630 acres	Since leaving school at 14	Secondary school	48, male
Farmer N	Medium beef and B+B on farm	600 acres	Since leaving school at 16	Secondary school	35-45, male
Farmer O	Medium lowland cattle and sheep	2 farms: 450 and 550 acres	Since leaving university, 1.5 years ago	University: studied *Agriculture* at Newcastle University	22, male
Farmer P	Medium lowland dairy	200 acres	Since leaving school at 16	Secondary school	35-45, male
Farmer Q	Large lowland dairy	220 acres	Since leaving agricultural college; 6 years as principle farmer	Agricultural college	35-45, male

Appendix 5: Letter of Introduction to Food Processors

{Address}

{Date}

{Addressee}

Dear Sir / Madam

Supply Linkages and Power Relations in the UK Agro-Food System

I am a PhD student at the University of Northumbria at Newcastle, undertaking a piece of academic research that is funded by the University and which addresses the above issues. In addition to a review of existing reports and other work on the topic, I would like to investigate the way that food processors in northern Cumbria organise and manage their ingredients' supply linkages. Therefore, I am contacting you to ask whether you would agree to be interviewed as part of my work. The interview would last a maximum of 1.5 hours and, to conduct it, I would travel to, or telephone you.

I will contact you within 5 working days of the above date to confirm that you have received this letter. This call will also give you the opportunity to ask me any questions you may have about my work, and allow me to determine whether you would be willing to be interviewed for my work. If you are able to help me, we can also arrange a convenient time for me to visit you to.

I look forward to speaking to you in the near future. If in the meantime you have any queries about the above please do not hesitate to contact me on tel. (0191) 227 3848.

Yours sincerely

Miss Johanne C Allinson.

Appendix 6: Letter of Introduction to Farmers

{Address}

{Date}

{Addressee}

Dear Sir / Madam

Supply Linkages and Power Relations in the UK Agro-Food System

I am a PhD student at the University of Northumbria at Newcastle, undertaking a piece of academic research that is funded by the University and which addresses the above issues.

You may be aware that I have recently interviewed your end customer ({Dairy MSFP / Butcher 1}) to find out how the organise and manage their ingredients' supply linkages. However, in addition to speaking to food processors, I would also like to investigate the way that {dairy / livestock} farmers in northern Cumbria organise and manage their end market supply linkages. So, as a result of meeting with {name of interviewee}, and discussing my research objectives with them, they agreed to speak to you on my behalf, to see if you would be able to help me with my work. The interview would last a maximum of 1.5 hours and, to conduct it, I would travel to, or telephone you.

After speaking to {name of interviewee and date of conversation with them}, I understand that you are willing to help me with my work. Therefore, I am now writing to confirm that I will contact you within 5 working days of the above date to arrange a convenient time for me to visit you to. This call will also give you the opportunity to ask me any questions you may have about my work.

I look forward to speaking to you in the near future. If in the meantime you have any queries about the above please do not hesitate to contact me on tel. (0191) 227 3848.

Yours sincerely

Miss Johanne C Allinson.

Appendix 7: MSFP and SME Food Processor First Interview Schedule

1. WHAT IS THE NAME OF YOUR BUSINESS:

2. WHEN WAS THE BUSINESS ESTABLISHED:

3. WHAT IS YOUR MAIN BUSINESS ACTIVITY :

4. WHAT INGREDIENTS DO YOU USE PER MONTH:

INGREDIENT	WEIGHT (please specify weight used)	MONETARY VALUE (£)

5. WHERE DO YOU SOURCE YOUR RAW MATERIALS FROM:

6. ON WHAT BASIS/ ES DO YOU ASSESS YOUR SUPPLIER

Quality	
Timing Of Availability Of Product	
Type Of Product	
Size Of Order	
Other (please specify)	

7. IF OUTSIDE OF THE REGION, WHY:

8. HOW DO YOU MAINTAIN CONTACT WITH YOU SUPPLIERS AND WHAT IS THE FREQUENCY OF SUCH CONTACT:

9. WHERE DO YOU SUPPLY TO:

Own Retail Outlet	
Local Retail Outlet	
Local Wholesaler	
Multiple Retailer	
National Wholesaler	
Grocer Outside Of The Region	

10. (a) ARE YOU INVOLVED IN & (b) HOW MANY PEOPLE ARE EMPLOYED, IN THE VARIOUS CAPACITIES, IN YOUR ORGANISATION:-

	Involved In	No. Employed

Management		
Processing Of Raw Materials For Manufacturing		
Manufacture Of Saleable End Product		
Packaging		
Retail Outlet		
Primary Production Of Raw Materials		

11. HOW IMPORTANT IS NEW PRODUCT DEVELOPMENT TO YOUR BUSINESS:

Overriding aim	
Occurs when there is spare capital available	
Happens purely by chance without forethought or planning	
Other (please specify)	

12. HOW DID YOU BECOME AWARE OF *NWFF* (North West Fine Foods) AND THE SERVICE WHICH THEY PROVIDE :

13. WHEN DID THE BUSINESS FIRST BECOME INVOLVED WITH *NWFF:*

14. HOW IS THE RELATIONSHIP MAINTAINED BETWEEN *NWFF* AND YOURSELF:-

Form Of Communication	
Frequency Of Meetings / Communication	
Nominated Representative From NWFF Visits Your Organisation	
Other (please specify)	

15. WHAT SERVICES DO NWFF PROVIDE:

16. DO NWFF ENCOURAGE THE USE OF LOCAL FARMS AS SUPPLIERS:

17. HAS THE PRODUCT RANGE ALTERED GREATLY SINCE JOINING *NWFF* (DO *NWFF* ENCOURAGE PRODUCT DEVELOPMENT):

18. HAS YOUR AWARENESS OF THE MARKET CHANGED SINCE JOINING *NWFF:*

19. (HOW) HAS YOUR LEVEL OF SALES CHANGED SINCE JOINING *NWFF:*

20. HAS YOUR CUSTOMER BASE WIDENED SINCE JOINING *NWFF* - How has your trading position altered:

21. DO YOU FEEL THAT THE SERVICE WHICH *NWFF* PROVIDES HAS BEEN INVALUABLE IN THE CREATION OF YOUR PRESENT MARKET POSITION:

22. WOULD YOU BE HAPPY TO BE TAKEN OVER BY A LARGE NATIONAL GROUP AND LOSE INDEPENDENT STATUS - why / why not:

23. WHAT ARE YOUR FEELINGS CONCERNING THE PRESERVATION OF THE LOCAL FARMING COMMUNITY BY MAKING THEM MORE INVOLVED WITH REGIONAL FOOD PROCESSORS:

24. WOULD YOU ENCOURAGE THE ESTABLISHMENT OF A LOCAL FARMING MARKETING BOARD FROM WHICH YOU COULD PROCURE YOUR MATERIALS:

Appendix 8: MSFP and SME Food Processor Second Interview Schedule

NAME OF FIRM:

1. ESTABLISHMENT:
(a) Date of establishment in this location (i.e. in Northern Cumbria):

(b) Why was your firm *initially* established in this location (for example consideration of proximity to road network, local farm produced supplies, etcetera) **PLEASE GIVE BRIEF DETAILS:**

(c) Why does your firm operate from this location *now* (Is is due to the same or other reasons for establishing in this location initially) **PLEASE GIVE BRIEF DETAILS:**

(d) How many sites of production and / or distribution / warehousing does your firm have in this location, PLEASE GIVE BRIEF DETAILS:

(e) SMEs ONLY: Why have you chosen to locate your production site outside of Carlisle:

REASON	BRIEF DETAILS RELATING TO REASON
Main food supplies / ingredients available close to point of production in rural area	
Use(d) Farms with whom you are acquainted as suppliers when you began production activities	
Ease (and cost) of management of supply contracts from this location rather than from within urban centre	
Business operated from home / close to home originally	
Cost of land and equipment in this location in comparison to within urban centre	
Availability of labour in this location (is there a high dependence on family / friends in your labour force)	
Production was originally a 'hobby' and not a serious business venture	
Proximity to market outlet	
Other *(please give as many brief details as possible)*	

2. DECISION MAKING:

(a) Who (in terms of their designated position in the firm) is responsible for making the following types of decisions:

TYPE OF DECISION	PERSON (POSITION) RESPONSIBLE	BRIEF DETAILS AS TO WHY DECISIONS ARE MADE BY THIS PERSON AT THIS LEVEL IN THE ORGANISATION
Choice of supplier of food ingredients and (re)ordering of supplies		
New product development and product market development research		
Contract maintenance with ingredients' suppliers		
Termination of ingredients supply contract		
Contract maintenance with distributors of product to market		
Contract maintenance with retailer (market) of your product		
Monitoring (and control) of food safety procedures and regulation adherence by suppliers		
Monitoring (and control) of food safety procedures and regulation adherence in-house in your firm		

(b) What are your reasons for close integration (where this does occur) with your food ingredient suppliers (e.g cost control; food safety management; joint management of product development better than independent development) **PLEASE GIVE BRIEF DETAILS:**

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3. FOOD SAFETY AND HYGIENE:

(a) With reference to the 'Food and Safety Act 1990' what control does your firm have in the management of a system of food safety and hygiene in the following stages of the food production chain:

STAGE IN THE PRODUCTION CHAIN	BRIEF DETAILS AS TO REASONS BEHIND DECISION TO ACT THUS
Specification of raw materials used by suppliers for the production of ingredients for your products (i.e. in terms of seeds used, fertiliser usage, crop and animal management practices, etc.)	
Specification of management of food supplies by suppliers before delivery to yourselves (i.e. in terms of refrigeration (or not), washing and grading of food supplies, packaging of ingredients, animal culling, etc.)	
Specification of means and manner of distribution of food supplies to your production unit by your suppliers	
Specification of means and manner of distribution of food supplies to your production unit by yourselves	
Specification of manner / type of warehousing of food supplies at your firm's production unit	
Specification of manner of processing of food supplies into food products (in relation to machinery cleanliness and repair, hygiene of machine operatives, etc.)	
Specification of manner of packaging of end product (either in-house or externally)	

(b) In terms of the control of food safety and hygiene in relation to the requirements of the 'Food Safety Act 1990', what is the degree of involvement by your firm in the DESIGN, IMPLEMENTATION and MANAGEMENT *CONTROL* of systems which maintain and monitor food safety and hygiene in your food supply / production chain:

AREA OF ACTIVITY IN FOOD SAFETY ASSURANCE IN THE PRODUCTION CHAIN	JOINT INITIATIVE BETWEEN YOURSELVES AND SUPPLIERS (Yes/No)	WITHIN YOUR FIRM (Yes/No)	BRIEF DETAILS (e.g. Your firm's opinion is that the safety of ingredients is best managed by yourselves, or, food safety is best managed between those parties involved in the supply / production chain)
Design			
Implementation			
Management			

4. PRODUCTION:

(a) What influences product development (product development being any changes made to production, be they modifications of existing products, or launch of a completely new product) (e.g. close contact with suppliers shows that they are able to suply a particular food ingredient; OR existing facilities on iste allow for product development; ORavailable capital allows for it; OR food safety requirements must be met before any product developments) **PLEASE GIVE BRIEF DETAILS:**

(b) What constitutes your firm's decision to produce for your own brand label and / or retailers' brand label (e.g. cost; market access / share; has always been done) **PLEASE GIVE BRIEF DETAILS:**

(c) What are your arrangements for packaging end products (i.e, in-house or external packaging facility used, and why - e.g. food safety; cost; or other) **PLEASE GIVE BRIEF DETAILS:**

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5. MARKETING / RETAILING:

(a) How do you market your products (i.e., Do you use wholesalers (local / national / international)? Do you distribute direct to retailer (local / national / international)? Products are collected by retailers? Mail order? Through firm's own shop? Or other) **PLEASE GIVE BRIEF DETAILS:**

(b) Why do you use this marketing channel for your products (e.g. cost control; always used this channel; to gain market share; other) **PLEASE GIVE BRIEF DETAILS :**

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6. THE ROLE OF THE LOCALITY - GOVERNMENT AND INSTITUTIONS:

(a) What role do the following LOCAL (within the geographical area of Northern Cumbria - defined as that area between Carlisle, Penrith, Keswick, and Maryport) organisations / bodies have within your firm AT PRESENT:

LOCAL PARTY	BRIEF DETAILS AS TO THE ACTUAL CONTACT OF SUCH PARTIES WITH YOUR FIRM AT PRESENT
Suppliers (Farmers and other food suppliers only)	
Haulage / Distribution companies	
Market Research companies	
Training and Enterprise Council	
Business Development Agencies	
Colleges	
Government	
Marketing organisations (such as North West Fine Foods (NWFF)) / boards	
Markets and Retail outlets	

(b) With specific reference to local government / development agencies' provisions for the agro-food system of Northern Cumbria, what would your firm require if you were to become a link in a PRODUCT supply chain network between farm level suppliers and food processors (such as yourselves) in Northern Cumbria (as defined in 6(a)):

POTENTIAL ROLE OF LOCAL GOVERNMENT / DEVELOPMENT AGENCIES	BRIEF DETAILS AS TO WHY SUCH A SERVICE WOULD BE USEFUL IN A PRODUCT SUPPLY CHAIN NETWORK
Be instrumental in making your firm aware of the potential suppliers to you in the locality (rather than your having to initiate a cost incurring search) thereby providing your firm with only those suppliers which meet your requirements	
Provide a facility which would 'advertise' your firm and your ingredient supply requirements to potential farm level suppliers in the locality	
Be active in the establishment (and, perhaps, management) of a communications network between yourselves and the farm level suppliers - in order to allow suppliers to be aware of your requirements at an early stage in the agreement	
Subsidise your payments to the local suppliers, or establish a payments scheme which would pay suppliers *only* on your receipt of suitable products	
Support your firm (in payments to local suppliers) in a transition period between your use of local- and extra -local suppliers	
Provide marketing and business support and advice to your firm and to local farm level suppliers which could help facilitate the establishment of a local supply network based on equal knowledge and understanding on both 'sides'	
Provide a body which would support the supply network (deal with complaints and misunderstandings)	
Provide training and education to your firm and suppliers if gaps in knowledge should arise in the supply network	

(c) Suppose your firm operated as a supplier in a supply chain network which shared INFORMATION relating to widening (globalised) markets and increasingly stringent legislation covering food safety and hygiene between food processors and farm level suppliers in Northern Cumbria (area as defined in 6(a)). What would your requirements be for your integration in such a venture in terms of what you would require of local government, colleges, development agencies, retailers, other food processors and farm level suppliers. PLEASE GIVE BRIEF DETAILS :

(d) Do you believe that it would be possible to establish a supply chain network for INFORMATION within the agro-food system of Northern Cumbria (as defined in 6(a)):

SETTING	YES / NO	BRIEF DETAILS AS TO WHY YOU BELIEVE THIS TO THE CASE
Between Food Processors of varying size (i.e. between large and small scale food processors)		
Between Food Processors (large or small scale) and Farmers (as suppliers of ingredients to Food Processors)		

(e) If you do believe that such a network as suggested in 6(d) would be possible, how do you imagine it could best be managed so as to avoid take-over (either financial or managerial) of small/medium size Food Processors and Farms? PLEASE GIVE BRIEF DETAILS:

(f) Would your firm would be willing to take a position of a MENTOR in a supply chain network as suggested in 6(d), where you would advise the best practice for such situations as, for example, dealing with larger retailers' supply demands, developing products which are safe for the market, developing more flexible supply chains, and other areas of concern in market activity by Food Processors in the 1990's? PLEASE GIVE BRIEF DETAILS:

Appendix 9: Farmer Interview Schedule

1: ENTERPRISE ESTABLISHMENT AND LOCATION DETAILS

1.1 Why have you chosen to farm in this location:

REASON	DETAILS OF WHY
Continuing family farm (inherited)	
Bought farm as it came up for sale	
Rented farm as it became available	
Other (please give some brief details)	

1.2 (a) What is your position on the farm? (Please tick applicable box):

POSITION	(✓)
Salaried farm manager	
Tenant farmer	
Owner occupier / manager	
Other (Please Specify)	

(b)How many years have you been in this position:- _____ years.

1.3 What are the number of people working on the farm in the following capacities:-

POSITION	FULL TIME	PART TIME
Principal farmer / grower		
Wife / husband / partner of Above		
Other family workers		
Salaried managers		
Other business partners		
Hired workers		
Seasonal / casual workers		

1.4 How is the farm owned:

TENURE	(✓)	AREA OWNED (ha)	AREA RENTED (ha)
Wholly owned			
Mostly owned (> 50%)			
Wholly rented			
Mostly rented (> 50%)			
Other (please specify)			

1.5 How is the majority of machinery and equipment used for main production activity on the farm owned:

MEANS OF OWNERSHIP	(✓)
100% owned outright by the farm business	
Loan financed	
Largely borrowed from friends / neighbours	
Owned by farmer co-operative	
Rented according to seasonal demands on the farm	
Provided by your end customer	

Other (please state)	

1.6 Do you use any 'external' services for advice / support / other, and how often:-

EXTERNAL SERVICE	Daily	Weekly	Monthly	Yearly	Never	Other
ADAS						
NFU meetings / membership						
MAFF representatives						
Rural Development Commission						
Colleges / TECs						
Grocery retailers						
Food Processors						
Business Development Agencies						
Accountant						
Local government						
Other (please specify)						

1.7 How long ago did you first seek external advice for your farm production activities, and why:

_____years_____months, because of _____

_____

1.8 Would you say that external agricultural services for farms in general were (please tick those applicable):

OPINION	(✓)	(✗)
Expensive		
Value for money		
Quite necessary		
Necessary		
Unnecessary		
Quite unnecessary		
A waste of money		
Other (Please Specify)		

2: FINANCE

2.1 Which of the following categories do you think best describes:

(a) your recent investment style over the past ten years, and

(b) your intended future investment style ? (please tick applicable boxes)

INVESTMENT STYLE	(a)	(b)
An unplanned investment style, investing in capital and land development only when returns permit.		
An essentially *ad hoc* investment style, within the context of a business plan of required future development.		
A relatively long term, but occasionally interrupted, programme of business development.		
A thorough and very rarely compromised long term programme of business development		
A mix of the above approaches, with episodes of		

programmed investment preceded and/or followed by periods of *ad hoc* investment		

2.2 (a) Has the farm taken a loan since 1980 for the purpose of investment in capital and land development (please tick applicable box):

YES	NO

(b) If yes, what was the source of the loaned finance:

SOURCE	(✓)
Bank	
Building Society	
Friend / family	
Finance company	
Finance from company which you supply to	
Other (please specify)	

2.4 (a) How would you best describe your business profitability over the past ten years ? (Please tick the applicable box)

DESCRIPTION OF PROFITABILITY	(✓)
Increasing strongly	
Increasing steadily	
Stable - high/acceptable	
Stable - low	
Fluctuating	
Declining slightly	
Falling sharply	

(b) How would you best describe your overdraft status over the past ten years ? (Please tick applicable box)

OVERDRAFT STATUS	(✓)
None	
Minimal	
Serviceable	
Considerable	

2.5 (a) Do you have any children, and
(b) do they work on the farm ? (Please tick and fill in applicable boxes)

CHILDREN			
NO	YES	AGE	WORKING ON THE FARM

2.6 Have you identified a potential successor who you expect to eventually take over the management of the farm ?

YES	NO

If YES, how old is that person now ? _____ years

3:PRODUCTION

3.1 **(a)What is the main production activity(/ies) on the farm, and the size of it (/them):-**

ACTIVITY	SIZE (ha)

(b)How many years has this been the enterprise mix:-
_____ years.

3.2 **What influences product *type* and *scale* of production on the farm at present:**

INFLUENCE	Influences type of production (✓/×)	Influences scale of production (✓/×)
Personal objectives		
Your end customer's requirements		
Other (please give some brief details as to what in the space below):		

3.3 **Does the farm engage in any of the following activities as 'alternativefarm enterprises'? (Please tick all relevant box/ es):**

Alternative Enterprise	(✓)
Harvesting	
Processing	
Distribution of produce	
Tourist accommodation	
Other alternative farm enterprise(s) (please give brief details)	
Contracting (please specify type)	

3.4 **On the farm, who is responsible for making the following types of decisions:**

TYPE OF DECISION	PERSON RESPONSIBLE & WHY
Machinery / equipment renewal	
Change to current production levels	
Introduction of new form / type of production	
Management of hygiene and safety in production systems on the farm	
The choice of your end customer	
Termination of contract with your end customer	

3.5 Where do you get information regarding the market where you sell your produce ? (Please tick all applicable boxes):

SOURCE	(✓)
Neighbours	
Member of farmer co-operative	
Associate of marketing board	
Grocery retailer who you are contracted to supply	
Food processor who you are contracted to supply	
Distributors of your produce	
Other Processors	
Other Grocers	
ADAS	
NFU representatives / meetings	
MAFF representatives	
Seed merchants	
Equipment salespeople	
Media	
Other	

3.6 What influences the manner by which you manage hygiene and food safety on the farm, and why:

INFLUENCE	DETAILS AS TO WHY
Industry guidelines	
Your end customer's requirements	
Personal specifications	
Other (please give some brief details as to what and why)	

3.7 Do you prepare the product in any way (i.e. washing, cutting, trimming, slaughtering) before it is transported to your end customer ? Please give some brief details as to what is done and why:

4: SALE OF PRODUCE

4.1 How are you made aware of possible customers (food processors, grocers,auctions, etc.) for your produce ? Please give some brief details below:

4.2 On what basis do you choose an end customer / market for (any of) your produce:

BASIS	YES / NO
Market advice and support from possible new customer	
Possible sales situation would allow you to manage production as you wish	
Quantity demanded of product meets your output	
Quality demanded of product meets your output	
Proximity of possible end customer to your farm	
Price offered by potential end customer	
Transport of produce managed by end customer	
Historical reasons (have always used this customer)	
Other (please give reasons)	

4.3 How do you sell your 'main' product/s, and how often:

TYPE OF CUSTOMER	Formal Contract	*Ad hoc*	How often ?
Food processor in Cumbria			
Food processor outside of Cumbria			
Grocery retailer in Cumbria			
Grocery retailer outside of Cumbria			
Wholesaler in Cumbria			
Wholesaler outside of Cumbria			
Co-operative in Cumbria			
Co-operative outside of Cumbria			
Local auction / market			
National auction / market			
International auction / market			
Other (please specify)			

4.4 How is the supply chain between yourselves and your end customer for your produce managed:

a) FORMAL CONTRACTS:

MANNER OF CONTACT IN FORMAL CONTRACT	(✓/×)
Governed wholly by customer	
Combination of management by you and customer	
Management wholly by yourselves	
Managed by external middleman	
Other (please indicate how)	

b)*AD HOC* ARRANGEMENT:

MANNER OF CONTACT IN *AD HOC* ARRANGEMENT	(✓/×)
Governed wholly by customer	
Combination of management by you and customer	
Management wholly by yourselves	
Managed by external middleman	
Other (please indicate how)	

4.5 In the instance of 'Formal' contracts to supply the end market:-
a) What does the contract specify you must do / provide for your end customer? (Please give some brief details)

---

b) How long is the duration of the contract, and what may cause the contract to be terminated ? Please give some brief details below:

4.6 Why do you sell your products in this way:

REASON	(✓)
Insurance against price changes in the market	
Retail market (customer) demand	
Guaranteed market for produce	
Traditional way it is done on this farm	
Ease of management of production and retail	
Above average returns for produce	
Other (please give brief details)	

4.7 Do you like to work independently (autonomously) from, or in close collaboration with your end customer? Please give some brief details:

5: SUPPLY CHAIN MANAGEMENT

5.1 With reference to *future contracts to supply agricultural produce* please consider the following statements and tick in the box/ es where you agree with the statement:

OPINION	(✓)
Contracts enable farmers to manage risk better.	
Retailers use contracts to manipulate the farmer.	
Processors use contracts to manipulate the farmer.	
Contracts are a waste of the farmer's time and money.	
Contracts reap better financial returns for farmers than the more traditional ways of selling farm produce.	
Contracts enable better planning of future projects on the farm.	
Retailers should issue supply contracts to farmers.	
Processors should issue supply contracts to farmers.	
Distributors should issue supply contracts to farmers.	
Marketing boards would be more beneficial to a farmers than a contract to supply an end market.	
A local farming co-operative would be more beneficial to a farmers than a contract to supply an end market.	
There should be a government system to ensure that contracts are 'dealed' out in a fairer way in farming communities in outlying areas such as Cumbria.	

5.2 How would you like the supply chain between yourselves and your end market customer to be managed (e.g. Wholly by yourselves; or, wholly by your customer; or, by an external party (such as, for example a division of MAFF or a food industry body). **Please give some brief details:**

6.SUPPLY NETWORKS IN CUMBRIA

In some parts of the world which are characterised by a large population of smaller farm businesses and a relatively large population of food processing enterprises, networks which link the farmers and the food processors together has benefited those enterprises involved in the network by providing relevant market information and opportunities for end market sales.

6.1 (a) Do you think that a distribution network for information relating to food production and end product marketing, offered by food processors and grocers for farms in Cumbria would be possible in the following management situations? (Tick where agreed):

(b) Would you be willing to be part of such a network ?(Tick where applicable) :

SITUATION	(a)	(b)
Managed by *a large farm, of the same type as those using the network* [who would administer use of information to farmer members and negotiate with food processors and grocers in- and outside of Cumbria].		
Managed by *independent business development agencies* [who would administer use of information to farmer members and negotiate with food processors and grocers in- and outside of Cumbria].		
Managed by *local government* [who would administer information to farmer members and negotiate with food processors and grocers in- and outside of Cumbria].		

6.2 (a) Do you believe that a distribution network which managed the flow of products from farms to food processors in Cumbria by using a central delivery point / warehouse for the produce would be possible in the following management situations ? (Tick where applicable):

(b) Would you be willing to (supply into) be part of such a network ?(Tick where applicable):

SITUATION	(a)	(b)
Managed by *a large farm, of the same type as those supplying the network* [who would administer marketing and business planning in the network and negotiate with food processors and grocers in- and outside of Cumbria].		
Managed by *independent business development agencies* [who would administer marketing and business planning in the network and negotiate with food processors and grocers in- and outside of Cumbria].		
Managed by *local (/ regional) government* [who would administer marketing and business planning in the network and negotiate with food processors and grocers in- and outside of Cumbria].		

6.3 If you were part of a network which shared information and agro- foodproducts between your farm and food processors in Cumbria, would you expect *any assistance* in the management and running of the network from the following bodies / institutions in, and why:

BODY	(✓/×)	REQUIREMENTS
MAFF		
NFU		
ADAS		
Rural Development Commission		

Regional haulage companies		
Colleges and TECs		

6.4 (a) How do you think a network to distribute information relating to production and market opportunities to farms within Cumbria could be managed so as not to disadvantage smaller farmers? Please give some brief details:

(b) How do you think such a network which would distribute produce gathered from a number of farms in Cumbria could be managed so as not to disadvantage smaller farmers ? Please give some brief details:

6.5 Do you think that regionally (i.e. 'Made in Cumbria') branding of agricultural produce would be a possible means of improving your own farm revenue? (Please tick where applicable):

YES	NO

7:PERSONAL DETAILS

7.1 What is your age? (please tick relevant category):

AGE	(✓)
20-25	
25-35	
35-45	
45-55	
55-65	
>65	

7.2 Are you? (Please tick relevant box):

Male	
Female	

7.3 When did you finish your schooling? (please tick applicable box):

LEVEL OF SCHOOLING	(✓)
Secondary / Grammar school	
Sixth Form	
Technical College	
University	

Appendix 10: Sample of within and Cross Case Analysis Codes for Farmers

Thematic and conceptual codes were created to develop an understanding of how the individual responses from the interview with the food processors and farmers related to the meaningful categories of data which are the major themes / issues within the conceptual framework for the thesis which is provided in Chapters 4 and 8 above. This Appendix provides a list of the meaningful categories of data that were sought (see Table A10.1 below which is an identical replica of Table 3.2, p.46) and a sample of the thematic codes that were created to analyse the farmer interviews (see Table A10.2 below). The reader should note that the same procedures were followed to analyse the data collected from interviews with the MSFP and SME food processors in the sample, but due to restrictions on available space, details of all codes used cannot be provided here.

Table A10.1 Meaningful categories of data sought in interviews with food processors and farmers

Food Processors	Farmers
• Location of enterprise • Factors of production • Ingredients' suppliers • Specifications made in supply chain management • Use of local resources in supply chain management • In-house food safety management • Production, marketing and retailing activities • Details about current supply linkages with end customers	• Personal and family details of the farmer • Details about farm production activities • Details about farm business enterprise management and decision making • Details about current supply linkages with end customers
• Opinions of intra-regional supply chain/ network development between farmers and food processors in the north Cumbria AFS	

Table A10.2 Sample of the Thematic Codes that were created to Analyse the Farmer Interviews

Meaningful data category	Thematic and conceptual codes
Primary production activity and why	***Livestock and some grain***
	Livestock
	Dairy
	Dairy and livestock
	Dairy, livestock and cereal
Influence on production type and scale	***End market***
	Desired revenue
	Farm efficiency
	Personal objectives
	Overdraft
	Desired and actual profit
	State
Existence of an AFE on the farm	***None***
	Tourism
Why farm here and now	***Personal and / or family related issues***
Number and characteristics of children and their current and potential future roles in the farm business	***Gender roles***
	Family embedded in business
	Farmer dependent on children to assist with day to day farm business continuity
	Children dependent on farm business
	Family dynamics / lifecycle affect labour availability
	Young children / premature plans for farm business continuity
	Conventional / traditional perspective on farm development
	Lack of interest in farm development / continuity
	Flexibility

Appendix 11: Sample of Conceptual Flowcharts used for Cross Case Analysis

Fig. A11.1 Conceptual Flowchart To Illustrate Theory Behind Farmers' Support of a Localised Information Supply / Exchange Network

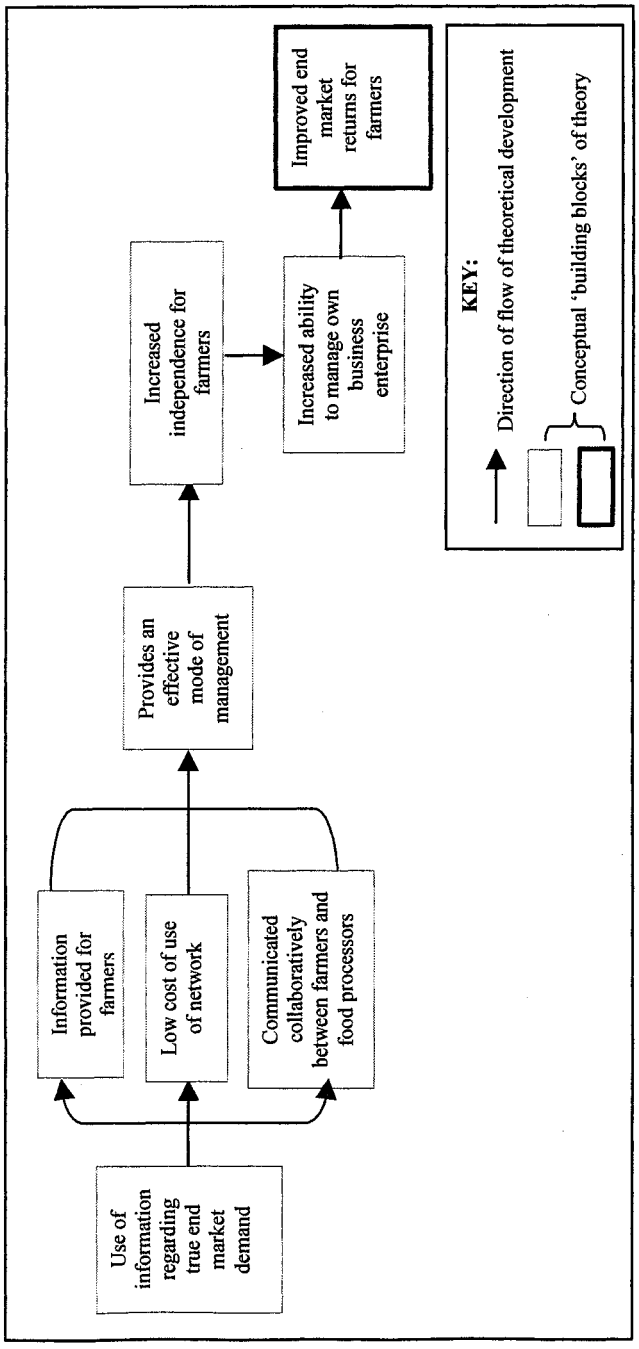

Fig. A11.2 Conceptual Flowchart to Illustrate Theory Behind Farmers' Support of an Independent Business Development Agency (IBDA) as the Manager of a Localised Information Supply/ Exchange Network